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The Official Souvenir

The New Jersey Commission

to the

Jamestown
Ter-Centennial Exposition

NORFOLK, VA.

April Twenty-sixth
November Thirtieth

1907

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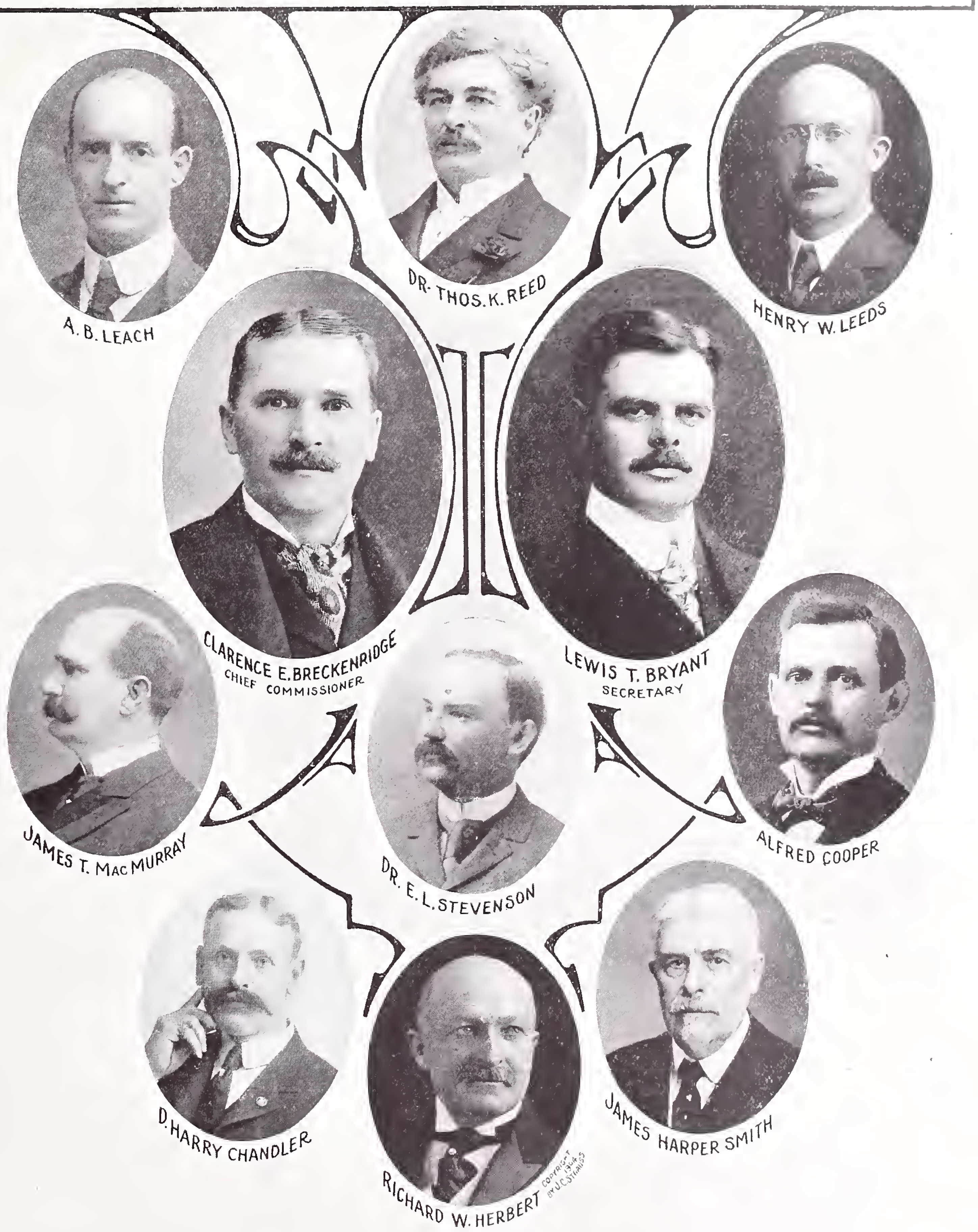

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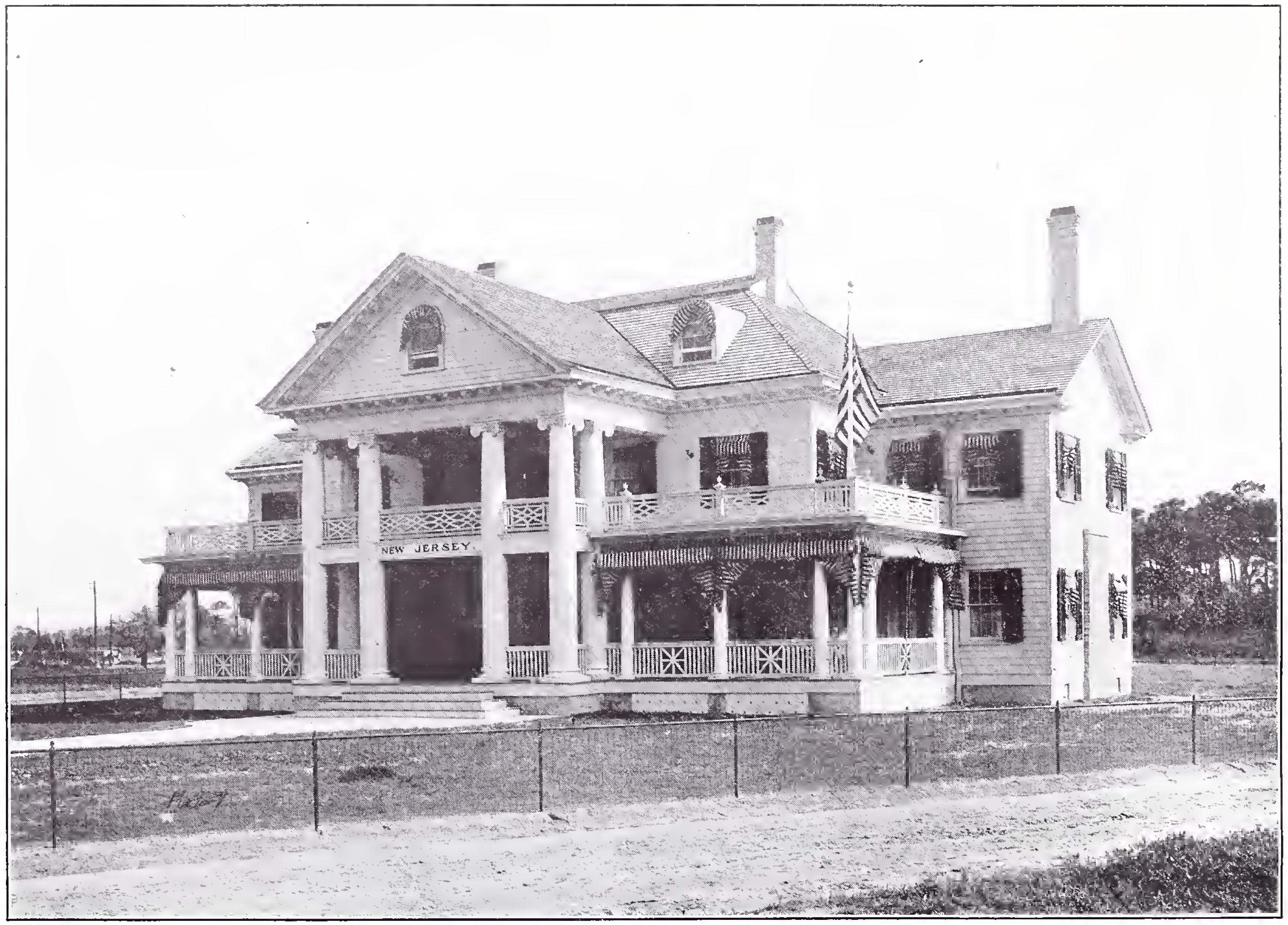

NEW JERSEY BUILDING, JAMESTOWN EXPOSITION.

INTRODUCTORY

In presenting this book to visitors at the Jamestown Exposition the claim is not made that it is the complete, comprehensive history that the great State of New Jersey ought to have, but it contains a number of facts concerning the beginning and growth—industrial, educational, commercial, agricultural and historical—of the State which point out very conclusively the advantages which New Jersey offers to those who are seeking opportunities for investment, employment or residence. These cannot be too fully set forth or too widely advertised. Naturally, the material contained herein had to be condensed, so that it is possible for the reader to get only a brief *resumé* of the things which have combined to make New Jersey one of the foremost and greatest States in the Union. Its contents are descriptive, statistical and historical and embrace an account of the State's resources, productions and progress.

The friendly rivalry that exists between the States of the Union is directed entirely toward securing for themselves population, industry and commerce, which three elements form the basis of colelctive and individual prosperity. It is generally admitted that New Jersey is one of the most prosperous divisions of the East, or of the entire country. This is due to her varied and extensive resources, developed and taken advantage of by an enterprising and intelligent population. It is fast becoming demonstrated as an established fact that New Jersey's agricultural and industrial, as well as commercial advantages, are equal, if not superior, to those of any other State bordering on the Atlantic seaboard. Her agricultural and stock-growing lands especially are of an extensive and most productive character and rival those of any other part of the United States.

In the large cities of the United States instances are constantly occurring of business expansion outgrowing factory accommodations, which, because of very high land values, cannot be adequately increased without a great outlay of money. In such cases manufacturers naturally seek new locations where land is inexpensive and where plants of greater capacity may be established at the least possible cost, and finally settle where the inducements offered are most to their advantage—in New Jersey.

The remarkable advance made by New Jersey, not only industrially and commercially, but educationally as well, and the consequent accession of population and increase in production and wealth, have been among the most noteworthy events in the history of the East. While every industry of the State seemed to receive a fresh impulse some years ago, it was not until within the past few years that this progress was so marked as to excite general notice. What has aided to fix the attention of the whole country and turn the tide of humanity to a large extent, New Jerseyward, more than any other one thing, has been her wonderfully productive bonanzas. The consequence is that capital and labor are both moving in the direction of the legendary star of the empire. Month after month witnesses an increase in the volume of immigration as each successive disclosure is followed by others still more marvellous. So we see people from all parts of the country as well as from Europe, coming to swell the population of this most thrifty of States, while yet other multitudes are contemplating a similar movement. The extraordinary developments that have been and are being made are convincing men from abroad, in common with the most enthusiastic Americans, that New Jersey's store of productive facilities equals that of any other state in the Union. At the same time it is generally conceded that a better field for investment is offered here than elsewhere, and that the State has a future before it of the most promising character. This is especially true of the State's agricultural and pastoral resources, its bountiful fields affording a never-failing source of income and development.

While the foundations of enduring wealth are secured by the industrial development, farming and pastoral resources, New Jersey offers a world of attractions and advantages as beneficial to those who reside within her borders as to sojourners from neighboring States and from abroad. Possessing a climate any land might envy, and surpassing all others in extent and beauty of her scenery and watering places, one cannot do otherwise than admit that Nature has dealt with a lavish hand in this "land of the East." Thus it is that her balmy air, exhilarating atmosphere, healthrestoring mineral waters, picturesque scenery and unrivalled fishing and bathing grounds are bringing visitors and residents from almost the entire world over. Pen fails to do justice to the massive grandeur of New Jersey's magnificent scenery.

EDWARD C. STOKES,
Governor of New Jersey.

STATE CAPITOL, TRENTON, N. J.

Members of the 131st Legislature of the State of New Jersey

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BERGEN
Edmund W. Wakelee, Demarest.
BURLINGTON
Samuel K. Robbins, Moorestown.
CAMDEN
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CAPE MAY
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CUMBERLAND
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Everett Colby, West Orange.

GLOUCESTER
John Boyd Avis, Woodbury.
HUDSON
James F. Minturn, Hoboken.
HUNTERDON
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MERCER
Barton B. Hutchinson, Trenton.
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PASSAIC
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SUSSEX
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Griffith W. Lewis, Burlington.
CAMDEN
Samuel P. Jones, Camden.
Theodore B. Gibbs, Clementon.
Frank B. Jess, Haddon Heights.
CAPE MAY
Corsville E. Stille, Tuckahoe.
CUMBERLAND
B. Frank Buck, Millville.
Frank B. Potter, Vineland.
ESSEX
Edward H. Wright, Jr., Newark.
Patrick H. Corish, Newark.
Simon Hahn, Newark.
John Breunig, Newark.
John J. Baader, Newark.
John C. Groel, Newark.
Thomas J. Mead, Newark.
Edgar E. Lethbridge, Orange.
John W. Lane, East Orange.
Daniel J. Brady, Bloomfield.
Harry F. Backus, W. Caldwell.

GLOUCESTER
William C. Cattell, Wenonah.
HUDSON
Mark A. Sullivan, Jersey City.
Charles P. Olwell, Jersey City.
Joseph P. Tumulty, Jersey City.
James Baker, Jersey City.
Charles E. Hendrickson, Jr., Jersey City.
Charles H. Blohm, Jersey City.
Joseph A. Riordan, Harrison.
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Philip Daab, Hoboken.
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Albert C. Eppinger, Town of Union.
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HUNTERDON
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Alfred N. Barber, Trenton.
William F. Burk, Trenton.
Henry D. Thompson, Princeton.
MIDDLESEX
William R. Drake, Stelton.
Frank Crowther, Perth Amboy.
Edward E. Haines, South Amboy.
MONMOUTH
T. Nelson Lillagore, Ocean Grove.
Isaac B. Davidson, Englishtown.
Frank J. Manson, Red Bank.

MORRIS
Richard J. Chaplin, Mt. Arlington.
Henry W. Buxton, Morristown.
OCEAN
Samuel S. Taylor, Lakewood.
PASSAIC
Abram Klenert, Paterson.
Frank A. Pawelski, Paterson.
William A. Merz, Paterson.
Henry J. Earle, Passaic.
John D. Van Blarcom, Hawthorne.
SALEM
Samuel A. Ridgway, Woodstown.
SOMERSET
William W. Smalley, Bound Brook.
SUSSEX
Levi H. Morris, Newton.
UNION
Randolph Perkins, Westfield.
Peter Tillman, Rahway.
John R. Moxon, Elizabeth.
WARREN
Joseph H. Firth, Phillipsburg.

History of New Jersey

Within the limits of what is now the State of New Jersey, aside from any evidence of the presence of prehistoric man in the "Trenton Gravels," the original inhabitants of the commonwealth were Lenni Lenape, or Delaware Indians. This subdivision of the great Algonquin family occupied the river valleys of the State, had made some progress in agriculture and in elementary arts, were peacable but small in numbers, and at last have become totally extinct in this portion of the United States.

In its settlement, New Jersey was not an English colony. The claims of the Crown, based upon an early discovery and various grants, were totally ignored by the two great Commercial nations of Europe—Holland and Sweden. It was not until 1664, practically a half century after the first occupancy of New Jersey by a white man, that England had aught more than a slight influence upon the destinies of the State. Insettlement, Holland was first to send out planters, under the auspices of the Dutch West India Company. Claiming both the valleys of the Hudson and the Delaware, by virtue of the explorations of Hudson and Mey, land was taken up upon the banks of the Hudson, Passaic, Hackensack, Raritan and smaller streams tributary to New York Harbor, as well as Gloucester upon the Delaware. By 1630 these claims were well established by occupancy, and by the creation of a centre of local government in what is now New York City. Upon the rapidly growing influences of Holland, Sweden looked with jealous eye. Gustavus Adolphus, in his plan to make Sweden a world-power, saw the Dutch to be dangerous rivals in America. In 1638 there was equipped a Swedish expedition to settle the valley of the Delaware. What is now the State of Delaware, the valley of the Schuylkill and isolated portions of the west bank of the Delaware River were occupied, civil and military government was established, and the colony of farmers and traders entered upon a brief career of prosperity. The death of Gustavus Adolphus, internal dissentions in Sweden, the inherent weakness of the Delaware settlements, and the constantly increasing power of Holland brought matters to a crisis. In 1655 New Sweden was conquered by New Netherlands, and for nine years the soil of New Jersey was absolutely under Dutch control.

WASHINGTON'S HEADQUARTERS,
Morristown, N. J.

Emerging from the interregnum of the Cromwells, the restoration of the House of Stuart, brought peace to England. On the 12th of March, 1664, Charles II., with royal disregard for previous patents, grants and charters, deeded to his brother James, Duke of York, a vast tract, embracing much of New England, New York and all of what is now New Jersey. This was accompanied by active preparations to drive out the Dutch from America, as they, in alien claims to New Jersey, practically separated the New England colonies from Virginia, Maryland and the Carolinas. In the summer of 1664 armed vessels appeared in New York Harbor. After negotiations, the Dutch surrendered and the power of Holland in North America became simply a matter of history. In the meantime James, Duke of York, transferred to two favorites of the House of Stuart, John, Lord Berkely, and Sir George Carteret—practically what is now the State of New Jersey. In honor of Carteret's defense of the Island of Jersey (Caesarea) during the Parliamentary wars, the territory was called New Jersey (Nova Caesarea).

Carteret and Berkeley, in granting a liberal frame of government and extolling the advantages of their colony so well located for agriculture, commerce, fishing and mining, attracted settlers not only from England, but from Scotland and New England, particularly Long Island and Connecticut. These planters were largely Calvinists, from Presbyterian and Congregational communities, and mainly occupied land in Newark, Elizabeth and upon the north shore of Monmouth county. The valley of the Delaware remained unsettled. The Calvinists brought into East Jersey distinctive views upon religious and civil matters. Early legislatures punished many crimes by death, the penalties being similar to those of the Jewish dispensation, while the "town meeting" strengthened the individual action of the small communities. There was an intense individualism in every phase of political and religious development, the life of the people centering around the church and the school house, the head of both, as in New England, being the minister.

In 1676 a division of the interests of Carteret and Berkeley occurred. In the meantime Berkeley had disposed of his rights to a company of English Quakers, a conflict had ensued, and to establish the claims of all parties concerned, the two colonies of East and West Jersey came into existence. A line was drawn from a point in Little Egg Harbor to the Delaware Water Gap, Berkeley and his assigns retaining West Jersey as their moiety, Carteret obtaining East Jersey.

By Berkeley's transfer the dominant influences in West Jersey was that of the Society of Friends. Salem was settled in 1675, Burlington, Gloucester and the site of Trenton about five years later, while within ten years thereafter the shore communities of Cape May and Tuckerton came into existence. The Society of Friends established in West Jersey a series of communities in which the life of the people was different from that of East Jersey. As East Jersey resembled New England in civil government, so West Jersey resembled Virginia The political and social centres of the large plantations were the shiretowns, slave owning was common, a landed aristocracy was established, prominent families inter-married, and under the advice of William Penn and his friends good faith was kept with the Indians. Capital punishment was practically unknown and disputes were settled frequently by arbitration.

Two elements of discord marked the genesis of East Jersey and of West Jersey. One, external, was the attitude of the Duke of York after he became James II. In 1673 New Jersey was recaptured by the Dutch, who held the colony until the early spring of 1674, reconveyances were made, but in spite of past assurances, James II. claimed the proprietary right of government. To that end Sir Edmund Andros was commissioned Governor of New Jersey, and a climax was reached in 1680 when the proprietary governor of East Jersey was carried prisoner to New York. In 1681 the Crown recognized the justice of the proprietors' convention, and a local government was re-established, but not before the seeds of discontent were sown that bore fruit in the Revolutionary War.

An internal disturbance was a contest between the Boards of Proprietors and the small land owners. Both in East and West Jersey, Carteret and Berkeley and their assigns had transferred to wealthy combinations of capitalists—most of whom were non-residents—much of the broad acreage of the colonies. With the land went the right of selections of Governors and of members of Executive Councils, which right Berkeley and Carteret had derived from the Crown. This, with "quit-rent" agitations in East Jersey, led to much bitterness. Finally, disgusted with turmoil, and viewing a sentiment of revolt on the part of the people, the Boards of Proprietors surrendered to the Crown, in 1702, their rights of government, retaining only their interest in the soil. East and West Jersey were united, and the two provinces became the royal colony of New Jersey.

From 1702 until the outbreak of the Revolution the political history of the colony was quite uneventful. Throughout the period of seventy-five years there was almost constant friction between the Legislature and the Governor and his Council. The governors, in the main, were crown favorites sent over the sea without a personal knowledge of the colony and with but an ill concealed ambition to wrest from the people as much money as could be secured for the support of themselves and the executive office. The Councils, composed of wealthy land owners of the Society of Friends and rich merchants from East Jersey, were quiescent, and even the members of the popular branch of the Legislature were chosen by those possessing property qualifications. The small non-voting farmers raised the cry of "aristocracy," and the equivalent "taxation without representation," and while loyal to the Crown were open in their expressions of dissatisfaction to the personal attitude of their governors. In 1738 New Jersey, in recognition of this sentiment, was given a governor separate from the one appointed jointly for the colonies of New York and New Jersey.

During this period the farm was the centre of the activities of the life of the people; particularly was this true in the western part of the colony, where favoring climate and soil, slave labor and the proximity of Philadelphia led to abundant crops and a good market. In East Jersey a commercial spirit was more active. Perth Amboy threatened to rival New York, and Jersey ships from Newark, Elizabeth and the Monmouth villages were to be found from Boston to Charleston. The repressive economic policy of the Crown precluded the development of manufactures. In the southern part of the State, sand and unlimited forests of oak and pine led to the development of glass making, while "bog iron," with abundance of lime from oyster shells, gave an impetus to the erection of forges and bloomaries. These, as well as the copper mines of the trap rock region, were throttled by adverse Parliamentary legislation. Ship building was a recognized industry, and cedar was extensively "mined" from sunken forests of the tide-water district. Whaling and other fisheries were unhampered, and were profitable, as was also the trade in skins and in hay from the salt meadows of the coast.

Throughout the years from 1772 to 1776, gold and silver and copper money was scarce. In obedience to the demand of the English merchants that competition should be crushed, legislation was enacted to draw "hard" money away from the colony. An inflated paper currency, first issued in 1707 to provide ways and means to aid the Canadian expedition against the French, poured from the printing presses. Trade was reduced to barter, and gold, silver and copper were practically at a premium for nearly three generations.

Of the more prominent incidents during the period were the organized attempts to suppress piracy in New York and Delaware Bays, the growth of a well defined system of transportation by land and water between New York and Philadelphia, the establishment of ferries and post roads, the reclamation of waste lands, the injection of Hugenot, Scotch-Irish and Palatinate German elements into the settled population, the chartering of Princeton University and Rutgers College, the religious revival led by Whitefield, the propogation of abolition doctrines by Woolman, the erection of a series of barracks owing to the French and Indian War, and what is probably of supreme importance, the growth of a sentiment of independence fostered by the stupid policy of the Crown, and carried from hamlet to hamlet, as much by itinerant hawkers and by "Redemptioners," who had served their time, as by any other cause.

The opening of the Revolution found New Jersey's sentiment unevenly crystalized. Few, if any, were favoring absolute independence. There were three elements. One, the Tory party, was led by Governor William Franklin, the illegitimate son of Benjamin Franklin. This conservative class embraced nearly all of the Episcopalians, a vast proportion of the non-combatant members of the Society of Friends and some East Jersey Calvinists. Another element was composed of men of various shades of belief, some in favor of continual protest, others desirous of compromise. This included at the outbreak of the struggle most of the Calvinists, some few Quakers of the younger generation, and the Scotch-Irish. The third party drew its support from a few bold, aggressive spirits of influence whose following included men who believed that war for independence would benefit their fortunes.

PRINCETON BATTLEFIELD.

Showing the Tree Under Which General Mercer Died.

The part played in the Revolution by New Jersey has been frequently told. Events passed rapidly after the affairs of Trenton and Princeton; Monmouth and Red Bank will never be forgotten, while the raids at Salem, Springfield, Elizabeth, in the valley of the Hackensack, and the winter at Morristown are a part of the national history. Occupying a position between New York and Philadelphia, its soil was a theatre where the drama of war was always presented. At no time was the Tory element suppressed, finding its expression in open hostility, or in the barbaric cruelties of the "Pine Robbers" of Monmouth, Burlington, Gloucester and Salem Counties. Though under suspicion, the Society of Friends were neutral, for conscience sake, remaining close to the teachings of their creed.

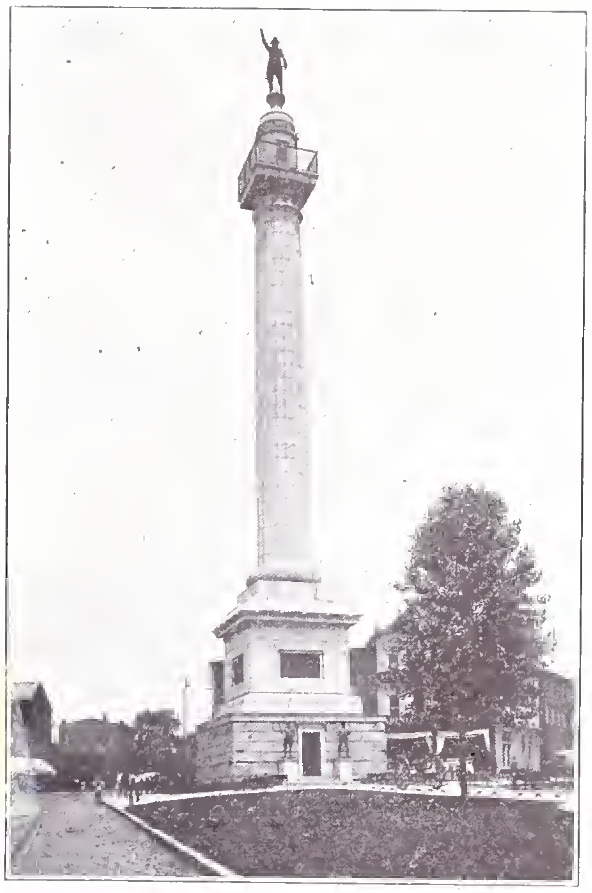
The close of the struggle found the people of New Jersey jubilant and not disposed to relinquish their sovereignty. The articles of Confederation were weak and had become a by-word and a jest. There was much State pride and much aristocratic feeling among the families who continued to dominate State politics. The Constitution of 1776, adopted by New Jersey as a makeshift war measure, provided that all state officers of prominence should be elected by a Legislature, which was chosen by voters possessing property qualifications. As in the colony, the Governor was Chancellor, and class distinctions were sharply drawn. In spite of agitation all proposed changes were rejected, and a strong federal union with the other states was viewed with dislike and suspicion. The State, in a quarrel with New York, at one time refused to obey the requests of Congress, and, in the exercise of Sovereignty, established a Court of Admiralty and coined money.

While the spirit of "State rights" was dominant, it was recognized by leaders of public thought that New Jersey was too weak to stand alone. She entered the Annapolis convention called to revise the Articles of Confederation, and whose lasting monument was the present Federal Constitution adopted in Philadelphia in 1787. Upon the 15th of June of that year the "New Jersey Plan," was presented, which, while lost as a measure, led to the famous compromise upon representation, whereby in the Senate of the United States the States were given equal vote, with a representation based in population in the House.

The adoption of the Constitution of the United States led to the rapid growth of political parties in New Jersey as elsewhere. In spite of the intense conservatism of the State, led by the Quakers of West Jersey, who were Federalists almost to a man, the anti-Federalist sentiment developed rapidly, spurred by a virulent party press, the death of men who had been trained in colonial methods of thought and the Democratic tendency of the Methodist Episcopal Church, which grew in the strength in West Jersey. In the eastern part of the State there was among the individualistic Calvinists a strong anti-Federal spirit. This, in 1800, led to the election of Thomas Jefferson as President of the United States and in 1801 the election of his political ally, Joseph Bloomfield, as Governor of the State of New Jersey. The death of Hamilton at the hands of Burr, and the death of Livingston, the "war" Governor, tore down the strongest pillars of Federalism in New Jersey, and led to the absolute domination of the State by the anti-Federalists, who held power until the outbreak of the second war with England.

The period from 1790 to 1812 in New Jersey was marked by a demand for internal improvements and better transportation.

The agitation concerning the Delaware and Raritan Canal, Stevens' experiments in 1802, with steam, along the lines laid down in 1785 by Fitch, the projectof the Society for Establishing Useful Manufactures at Paterson as early as 1791, and highways conducted through the northwestern portion of the State, indicate the trend of public sentiment.



NEW JERSEY BATTLE MONUMENT,
Trenton, N. J.

The second war with England was not altogether a popular measure in New Jersey. The Federalists, the "Peace Party," secured control of the Legislature and elected their Governor. Nevertheless the State furnished her quota of troops. The one permanent effect of the struggle upon the State was indirect. Owing to the movement of supplies and the necessity of quick transportation between Philadelphia and the exposed port of New York, the wagon roads between Bordentown and Perth Amboy, and between Trenton, New Brunswick, Metuchen, Rahway, Elizabeth and Newark, were improved and their advantages as "short routes" demonstrated. Upon these lines two later railroads, now a part of the Pennsylvania System, were constructed.

The era following the close of the war of 1812 until the opening of the Civil War was one of stupendous activity. Interrupted only by the financial depressions of 1817 and 1837, and slightly retarded by the Mexican War, the progress of the state was beyond the wildest dreams of the enthusiast, Alexander Hamilton. In the eastern part of the State, aided by a constantly increasing foreign population, Jersey City rose from the marshes, Newark grew toward her present greatness, Paterson became a centre of industry, while in the west, Camden was recognized as an available site for manufactures. The public school system was established and extended, reforms in the caring for the criminal, defective, delinquent and dependent classes were instituted, railroads were reaching every town of size, in the vicinity of New York and Philadelphia, ferries were erected, banks established, post offices opened and newspapers printed. In 1844, when social unrest was most marked, the present State Constitution was adopted by a large popular majority and needed reforms tending to elevate the legal position of married women, imprisoned debtors and bankrupts were adopted.

The year 1860 brought a termination to the then impending conflict. While every other State north of Mason and Dixon's line by 1850 had set the black men free, there were still 236 negroes in bondage in New Jersey. The abolition movement made slow progress and an anti-war party had a decided following. But when the die was cast New Jersey responded to the call for men and money. She furnished 88,305 men, or within 10,501 of her entire militia. For organizing, subsisting, supplying, supporting and transporting her troops she paid $2,894,385, and upon the field sustained the reputation for bravery she had won during the days of Trenton and Monmouth.

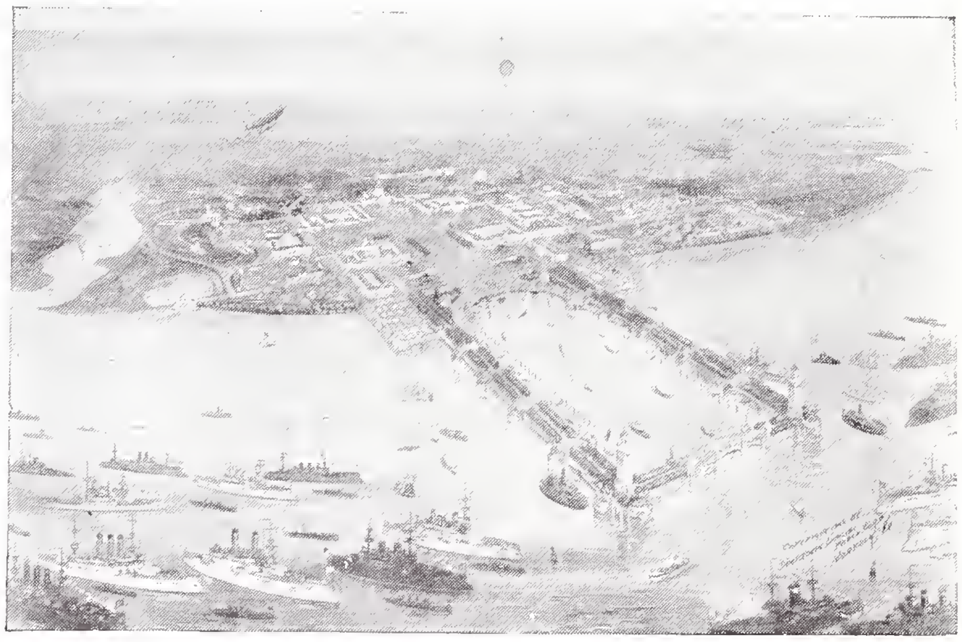
COTTAGE AT ELBERON.
In Which General Garfield Died.

Since the Civil War New Jersey has become the centre of marvelous activity in nearly every line of human progress. Her mills clothe multitudes; within her borders are found the termini of every railroad system of the United States, with one exception, penetrating the South and West; her market gardens feed 5,000,000 people; a series of cities arisen upon the desolate sands of the sea shore furnish health and pleasure to hundreds of thousands of visitors; her mines supply zinc and copper; her fisheries are world-famous, and her farms and dairies are models.

The Jamestown Exposition

The object of the Jamestown Exposition is to celebrate the three hundredth anniversary of the first permanent English settlement on the American continent, which, as history records, occurred on the 13th day of May, 1607, on a peninsula jutting out into the James River about forty miles above its mouth. But, as the waters of the James River have long since tranformed the peninsula into an island and almost carried the island into Hampton Roads, and as there is now but little left of the original Jamestown but the old church tower that is fast falling to oblivion, and a few foundations of fallen structures, and as the few hardy Englishmen who come over in the Godspeed, the Susan Constant and the Discoverer, first landed at what is now Old Point Comfort, to rest and recuperate, it was decided that this point, or some point near it that was suitable for the purpose should be selected for the place to celebrate the Ter-Centennial. Sewell's Point, directly opposite Old Point Comfort, with the broad and deep waters of Hampton Roads lying between them, was found to be the most available and was happily chosen. But before going into a description of the location it may not be out of order to add a few words concerning the result of the establishing of this colony.

It was at Jamestown that the white man first met the red man, and in the midst of toil and tribulations, planted the seeds of civilization; it was here that trust and treachery alternated till the white man triumphed and the red man vanished from the scene; it was here that for the first time in America an English marriage was solemnized; it was here that the first English child in America was born; here was held the first trial by jury; here the first legislative body convened in America, and here was laid the foundation of a nation which has stretched its dominion and its millions of freeman across a great and fertile continent to the shores of the Pacific and to the fair islands beyond.



BIRD'S EYE VIEW OF THE JAMESTOWN EXPOSITION.

It is to commemorate all this and to mark the phenomenal growth and progress in education, art, science, manufacture and commerce, during the three hundred years that have intervened between then and now, that the Jamestown Exposition is being held.

The selection of Sewell's Point as a site for the exposition was a happy one. In all this broad land, from the Atlantic to the Pacific, or from Maine to Mexico, it would be hard to find a spot more favored by nature and environments, for a great international exposition. There may be other bodies of water as broad and deep as Hampton Roads, with harbors as land-locked, but they are not so accessible in time of peace, nor so inaccessible in time of war. Nor, can there be found a point elsewhere surrounded by so many places of historical interest in which so many people at home and abroad share—points that not only mark the giant strides of progress made in the last three centuries, but that also mark the initiative and the final stroke of the god of war in more than one fierce conflict. Jamestown, where liberty was virtually born, and Yorktown, where it virtually reached its majority, are close together; Washington, at the head of Tidewater on the Potomac, and Richmond at the head of Tidewater on the James, are not far from here and not far from either of them is Appomatox, where the strife that centered in these two cities, reached its climax at its close. All over Tidewater Virginia are monuments that silently but grimly remind us of the cost of this conflict, but out of it has come a great and prosperous nation, and it is to herald its greatness and prosperity, and to commemorate its birth that the Jamestown Exposition is being held.

POWHATTAN OAK.

Jamestown Exposition Grounds.

No exposition has ever been held that was surrounded by so many points of historic interest as the Jamestown Exposition is. Volumes of history has been made within a few hours ride of the grounds, and circled around it are commercial centres that are fast growing into prominence. But, if the Jamestown Exposition is surrounded by a section of the country so frought with historic interest, so blessed with the grand and beautiful, and teeming with that life alone felt and seen in a semi-tropical region, the grounds of the exposition are a fitting gem for the brilliant setting. Nature in the first place was lavish with her gifts and the art of landscape gardening has added much to the picture that greets the eyes of visitors. The grounds consist of about 500 acres on which are growing over a million of trees, plants, shrubs and flowers, most artistically arranged. In many places, where possible, the original woods and pines have been left, and a number of picturesque grass plots near the great buildings are beautiful with the presence of some widespreading forest giant.

The grounds have a water front of three miles in the form of a semi-circle, on Hampton Roads and Boush Creek, thus leaving only about 11,000 feet to be protected by fence. This fence is in itself a thing of beauty. It is eight feet in height and is made of wire mesh and heavy barb, covered with vines so systematically planted as to make an impenetrable barrier of beautiful foliage. These vines were planted in May, 1905, and as they are native to the South, are now of a very dense growth. At each post has been plantea a trumpet vine, between each post a crimson rambler rose, and between the trumpet vine and the crimson rambler rose, honeysuckle has been trained, the whole making a mass of verdure begemmed with fragment flowers that charm the eye and fill the air with fragrance.

The grounds, which embrace some 500 acres, form a beautiful setting for the architecture, which is of the colonial period. The magnificent and commodious exhibit buildings include Auditorium and Administration, History and Historic Art, Education and Social Economy, Manufactures and Liberal Arts, Machinery and Transportation, States Exhibit Palace, Pure Food Building, Mines and Metallurgical, Palaces of Commerce, Agriculture and Horticulture, Marine Appliance, Power and Alcohol, Medicine and Sanitation, Graphic Arts, the Arts and Crafts Village and numerous special buildings.

The group suggests the baronial structures of the seventeenth century of England. With massive Corinthian columns surrounded by a perfect landscape, they constitute an everlasting picture of grandeur and beauty. Several enlarged replicas of famous American public buildings and homes are presented which preserve the identical outlines and conform in proportion.

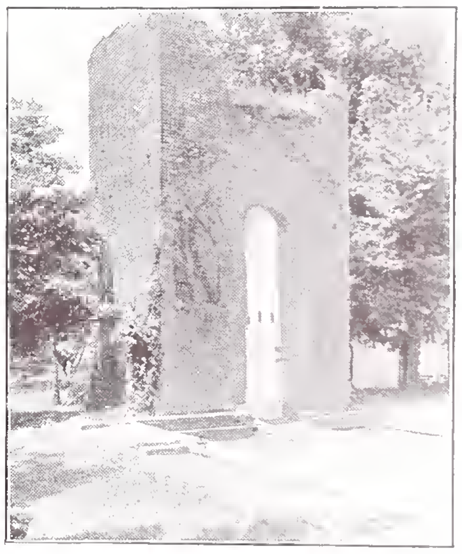
The United States Government participates extensively in this great celebration, having eight buildings and an immense pier, besides its warships and soldiers which take an important part [illegible] The Government buildings consist [illegible] exhibit building in [illegible] partments are represented [illegible] ing, with exhibits from [illegible] Hawaii and the Phili[illegible] ing, showing the [illegible] race; a building for the officers of the armies and navies of the United States, and of visiting countries; a building for enlisted men of the armies and navies of the United States, and of foreign countries visiting the Exposition; Fisheries Building, Life-saving Station and the Grand Piers which extend out into the waters of Hampton Roads for a distance of 2400 feet.

RUSTIC BRIDGE.

Jamestown Exposition Grounds.

The Department of State exhibit consists of facsimiles of the Declaration of Independence, the Articles of Confederation, and the Constitution, and portraits and autographs of the makers and signers of these great instruments; Monroe's message containing what is known as the "Monroe Doctrine;" the swords of Washington, Jackson, Taylor, Harrison and Grant; the seal of the United States and other interesting relics.

The Treasury Department maintains a small department of engraving and printing, which illustrates the method of platework used in making the Government paper currency, and also a small mint showing the process of coining money.



OLD CHURCH TOWER.

Jamestown Island.

The War and Navy Departments have a very comprehensive exhibit of equipment, ordinance, uniforms, signal flags, and a model of the floating dry-dock "Dewey."

The Smithsonian Institute has an exhibit that embraces all the departments—ethnological, anthropological, geological and biological. The exhibits dealing with the ancient civilization of Mexico and Yucatan are particularly comprehensive.

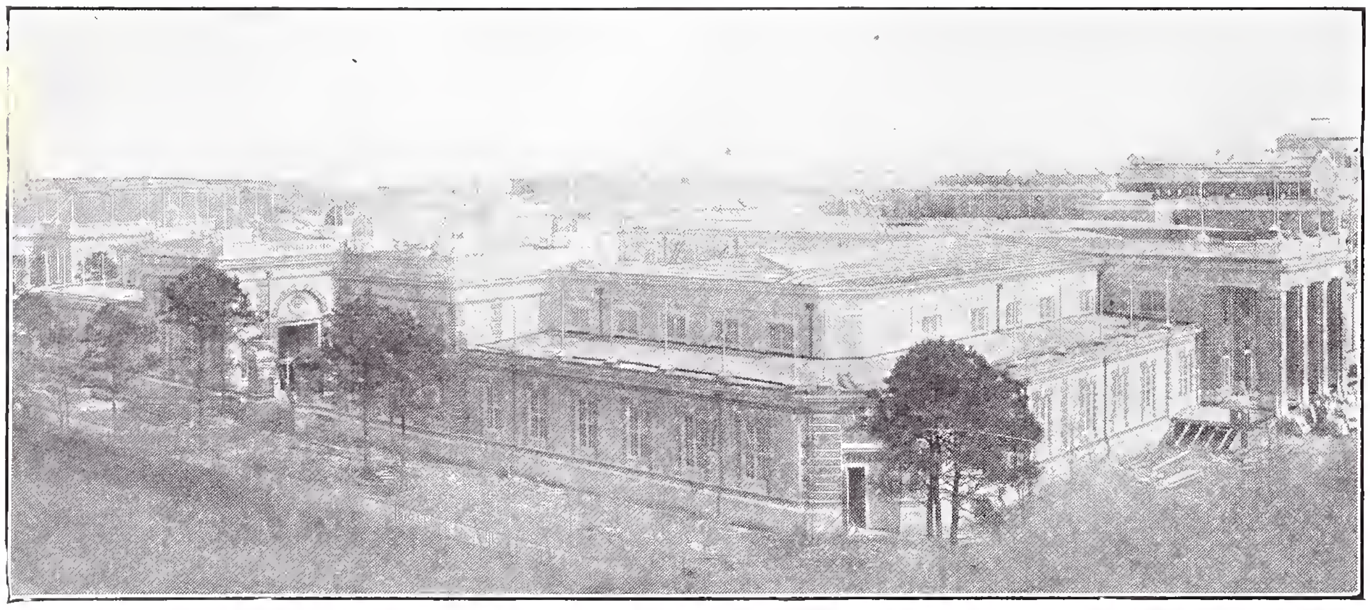
The Library of Congress shows first of all a model of the new library in Washington. There are also many rare maps, and autograph letters of Washington, Jefferson, Jackson, Paul Jones, Winfield Scott, Alexander Hamilton and other distinguished Americans. There are also many valuable manuscripts in this exhiibt.

The Department of Agriculture gives particular attention to plant disease and nature's medicinal plants. It also has a large grass display, and the Bureau of Entomology has an extremely valuable display covering all the Government experiments within recent years relating to destructive insects and methods of their extermination.

The Department of Commerce and Labor has an exhibit of its most important branches, the Bureau of Fisheries and the Lighthouse Service. Owing to the nature of the Exposition, these exhibits are most complete and embrace everything of interest connected with these important branches of the Government service.

The Post Office Department operates a model post-office, and the Departments of Justice and the Interior also have a most interesting exhibit.

Perhaps the most spectacular, original and unique part of the Government's contribution to the Exposition is the magnificent Water Basin, which juts into Hampton Roads, and forms a safe and commodious harbor for small craft, while the piers enclosing the basin form a fine point of vantage from which to view the naval displays in the harbor. Two of these piers, each two hundred feed wide, extend nearly a third of a mile out into Hampton Roads, and on the shore line are handsome landing stations; at the further end is a connecting pier, also two hundred feet wide, arched in the center to permit the ingress and egress of small craft. At the ends of the main piers tall towers have been erected for the exhibit of the lighthouse service and for wireless telegraphy. A million incandescent lights illuminate the entire stretch of pier-way, and monster search-lights surmount the towers. The enclosed harbor has an area of 1,280,000 square feet, and a depth of ten feet at mean low tide.



PURE FOOD BUILDING, JAMESTOWN EXPOSITION.

Landward about a thousand yards from this harbor, the great Administration Building stands, flanked on either side by companion structures, one devoted to History and Historic Art, and the other to Education and Social Economy. The Administration Building will serve a double purpose. The principal offices of the company will be here during the exposition, and several auditoriums in the building will serve as convention halls, while a number of rooms may be utilized for smaller conventions. Of these there will be several hundred during the continuance of the Exposition.

In the History and Historic Art Building there are exhibits, relics, documents, etc., illustrating every period of our nations history. The support of the leading historical societies of the country was obtained, and each contributed matter especially devoted to illustrating the event or period which the Exposition commemorates. In this building are also shown paintings, engravings, etchings, sculptures, bas-reliefs and other artistic conceptions, each of which typifies some historic incident or character connected with the country's life.

On the opposite side of the Auditorium is the Education and Social Economy Building, containing educational exhibits from public schools and colleges, together with exhibits in municipal and rural improvements, charities and corrections, prevention and diminution of accidents in trade, regulation of industry and labor and other subjects that make up the science of social economy, which has been termed the philosophy of humanity, since it deals with every problem arising from human relationship.

The twin structures on either side of the plaza that fronts the Auditorium are are Manufactures and Liberal Arts and the Machinery and Transportation Buildings. In the Manufactures and Liberal Arts Building is a comprehensive exhibit of industrial interests of all kinds, showing modern processes and methods, the handiwork of twentieth century machinery and the machines that have brought about the nation's present industrial development.

In the Machinery and Transportation Building are exhibits of railroads, electric roads, automobiles, motor cars, steamships and vehicles of all kinds. There are all classes of vehicles and all classes of motive power, from the powerful and swift locomotive to the tiny engines that propel aerial and nautical craft, or the automobile or motorcycle, and from the finest palace coach or carriage to the broad-tread or lumbering ox-cart.

Probably the most beautiful structure on the grounds is the States Exhibit Palace. It is also the largest, and, with its great inner court, is a labyrinth of beauty. The purpose of the structure is, as its name indicates, the housing of the special exhibits of the various states, such as could not be appropriately exhibited in the other buildings of the Exposition. This building is one of the most interesting of all, not only in the exhibits it contains, but in the grandeur of the structure itself.

Another building of interest is the one devoted to the Pure Food demonstrations which are given a prominent place in this Exposition. This is an innovation in exhibit work, and it is likely to meet with a responsive chord from the long-suffering public. In this building lectures and demonstrations are given along this line.

The Mines and Metallurgical Building contains interesting exhibits of the mining resources of different states, together with the various apparatus and equipment used in the mining of different minerals. A palace built entirely of coal is also exhibited in this building.

Because of the fact that this is the first Exposition to be held on the shores of deep water, a building has been erected which is known as the Marine Appliance Building, in which are displayed all forms of manufacture that go to make up ships and craft of all kinds, including ordnance and all paraphernalia that make a complete war vessel or merchant marine.

A building has been provided for the display of the agricultural, horticultural and flori-cultural industries of the nation, and an annex to the building is used for the display of agricultural implements and special exhibits of products of the South, peanuts, cotton and tobacco receiving especial attention.

In keeping with the ideas of the general usefulness of the Exposition, the Medicine and Sanitation Building has been erected, in which are grouped all medical and hospital devices and appliances, together with hygenic and sanitary manufactured articles, and many professional specimens from the various museums are displayed for their educational effect upon those who view them.

Among other buildings of the Exposition group are the beautiful Palaces of Commerce, with bazaars for foreign and domestic goods, and the Building for Power and Alcohol, where demonstrations are given in denatured alcohol and its uses for power, etc.

The widespread interest in the revival of Arts and Crafts suggested the idea of the Arts and Crafts Village, which is located at the east end of the Exposition grounds. Artistically situated amidst shady groves, a wilderness of flowers, romantic nooks and paths, the whole traversed by the placid waters of the "Canoe Trail," the buildings that house the arts and crafts make one of the prettiest pictures of this beautiful "Colonial City by the Sea." The houses are six in number, and among them are the Textile and Pottery Buildings, the Iron Shop, the Silver and Copper Shops, the Model School, the Hospital and the Building for Mothers and Children.

The national and international character of the Jamestown Exposition was long since recognized by the various states of the Union, and the importance of participating therein realized. Nearly every state in the Union is represented, and the State Buildings are among the manifold interesting features of the Exposition. The prevailing style of architecture of the Buildings is colonial, to conform with the general design, but some of the States have reproduced famous buildings of different types, the purpose being to present likenesses of famous homes or halls where great personages dwelt and great events occurred.

The section devoted to amusement concessions is called the "War Path," and many remarkable and interesting features are shown.

New Jersey at the Jamestown Exposition, 1907

By S. R. MORSE, Director of Exhibits

The Governor of New Jersey appointed the following gentlemen Commissioners to the Jamestown Ter-Centennial Exposition: Clarence E. Breckenridge, Alfred Cooper, Henry W. Leeds, D. Harry Chandler, James Harper Smith, Wallace M. Scudder, Richard W. Herbert, A. B. Leach, Dr. E. L. Stevenson and Dr. Thomas K. Reed.

The Commissioners organized by electing Clarence E. Breckenridge, Chief Commissioner; Wallace M. Scudder, Vice President; and Col. Lewis T. Bryant, Secretary.

GOOD ROADS EXHIBIT.

The Department of Good Roads, in order to show what New Jersey has done along this line, it having been one of the first states to begin to assist in building good roads, has an exhibit of photographs, etc., in the States Exhibit Palace. It was originally intended to have an outdoor exhibit similar to the one it had at St. Louis, but this was subsequently decided otherwise.

STATE MUSEUM EXHIBIT.

This consists of specimens and work taken from the New Jersey State Museum, which is conducted on a purely Educational basis.

The Geological Exhibit is very attractive and nicely arranged. It consists of different minerals of the State such as iron, zinc, trap rock, gneiss, minerals from Franklin Furnace, clays, building stones, glass and other modeling sands, copper, magnetites, fossil fish, lime stones, hematite and siderite ores, serpentine and large numbers of specimens of crystalization. This was prepared by Henry B. Kummel, State Geologist.

The fish display is very attractive as well as the birds. The fish occupy two large cases, the birds two large cases and 48 glass globes arranged in groups of birds, nests and eggs. There is also a large collection of birds' eggs.

There is a nice display of mammels in groups. The insect exhibit is very complete, and includes the one prepared by Prof. John B. Smith, State Entomologist, "How to Exterminate the Mosquito," one of the most complete of its kind ever prepared. There are many other specimens from the museum which makes one of the best exhibits ever presented by the State.

SOCIAL ECONOMY.

The Social Economy Exhibit is located in the Social Economy Building. It has exhibits from the following State schools and departments:

SCHOOL FOR THE DEAF.

The School for the Deaf, at Trenton, N. J., of which Dr. John Walker is principal, is the only one of the kind in the State. It has done and is still doing first class work. It is under the control of the State Board of Education.

THE INDUSTRIAL SCHOOL FOR COLORED YOUTH.

The Industrial School for Colored Youth, Dr. James M. Gregory, principal, is located in Old Ironsides, Bordentown, N. J. This school has done good work. It is under the control of the State Board of Education also. The Governor and the State Board of Education decided to make it cover a much larger field, and asked the last Legislature to give them the money to carry out their plans and appropriated $30,000 for a new building and $12,000 for maintainence. The interest is to make it an institute after the one at Tuskogee and Booker T. Washington has been asked to assist them in the work.

STATE HOME FOR GIRLS (REFORM SCHOOL.

The State Home for Girls is a reformatory school and is governed by a Board of Managers, Miss Elizabeth V. H. Mansell, superintendent. It is located at Trenton. This school has done much for the class of girls that did not have the proper training at home, the most of them receiving a good education and training, and many of them provided with good homes.

STATES' EXHIBIT BUILDING, JAMESTOWN EXPOSITION.

STATE HOME FOR BOYS. (REFORM SCHOOL.)

The State Home for Boys is similar to the Home for Girls and is governed by its own board of managers. The boys are divided into homes and receive an education and each given a trade whereby they can earn an honest living when they leave the institute. It is located at Jamesburg, N. J.

HOME FOR THE CARE AND TRAINING OF FEEBLE-MINDED WOMEN.

This school is under the supervision of Mary J. Dunlap, M. D., and is located at Vineland.

TRAINING SCHOOL FOR FEEBLE-MINDED CHILDREN.

This school is under the superintendency of Edward R. Johnstone. This is also located in Vineland. These schools have done and are still doing an inestimable amount of good for this class of persons, as the work on exhibition will show.

BUREAU OF LABOR STATISTICS.

This department is under the directorship of Winton Garrison, chief. Its object is to advance the laboring interest of the State as well as that of the manufacturers, and has been a very useful and beneficial department. Its exhibit is one of the most interesting in the whole of the New Jersey Exhibits.

THE BANKING, BUILDING AND LOAN ASSOCIATION.

The Banking, Building and Loan Exhibit was prepared by the department of banking and insurance, Hon. David O. Watkins, chief of the department. The exhibits consist of photographs of many of the bank buildings of the State, also of buildings built by the aid of the Building and Loan Association. It has statistics showing the growth of the State Banking and Trust Company and Constitutions and by-laws of several Building and Loan Associations as well as copies of the laws governing the Banking and Trust Company and Building and Loan Associations. No State department is better conducted than this.

STATE BOARD OF HEALTH.

This department is governed by the State Board, Dr. Henry Mitchell, secretary. Beside looking after the sanitary conditions of the State it is the head of the Pure Food department and has to see that the law is enforced. Their exhibit is along this line.

THE HEALTH RESORT EXHIBIT

This is a very attractive exhibit located in the State Exhibit's Building near the other New Jersey Exhibits and is represented by exhibits of photographs, pictures and literature of the following resorts:

Long Branch, which besides other exhibits has an $800 oil painting of the resort; Belmar, Asbury Park, Lakewood, Atlantic City and Wildwood are making a very attractive and interesting exhibit.

THE HISTORICAL EXHIBIT.

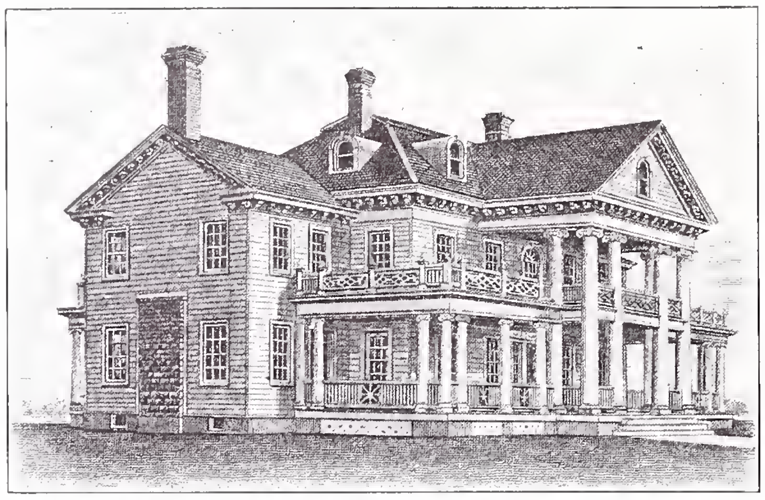
The historical exhibit under the direction of Francis B. Lee is an exceedingly valuable and interesting exhibit in the Palace of History.

THE EDUCATIONAL EXHIBIT.

This is a Comparative Exhibit such as has never been undertaken at any Exposition before. It is located in the States Exhibit Building just across the aisle from the State Museum Exhibit and along side of the Health Resorts Exhibit. It is made up of work from the Exposition at Philadelphia in

1876, at New Orleans in 1885, at Chicago in 1893, at Buffalo in 1901, at Charleston in 1901-02, at St. Louis in 1904 and new work prepared in 1907 for the Jamestown Exposition. It is the most interesting exhibit New Jersey has ever made. It is intended to show what progress the State School System has made in the past 31 years by comparing the work from these several Expositions. It fills 50 New Jersey Wing Cabinets and the drawers under them and several large revolving book shelves beside the work on the walls. It is one that will be studied by a large number of educators and teachers. It shows what great progress New Jersey has made during this time and should be seen by all interested in education. Be sure to visit it.

The New Jersey State Building at the Jamestown Exposition represents a practical reproduction of the Old Fford Tavern at Morristown, New Jersey, which was used as Washington's headquarters during the winter of 1779-80. Alexander Hamilton made this his home throughout the winter, and there met the daughter of General Schuyler, whom he afterwards married. Among the other famous men of American history who have been beneath its roof are Green, Knox, Lafayette, Steuben, Kosciusko, Schuyler, "Light Horse" Harry Lee, Old Israel Putman, Mad Anthony Wayne, and that brave soldier but rank traitor, Benedict Arnold. This building is still standing, and is maintained by the Washington Association of New Jersey, in order that its connections with this historic period may be preserved as a sacred memory through future generations.



NEW JERSEY STATE BUILDING, JAMESTOWN EXPOSITION.

New Jersey as a Manufacturing State

By WINTON C. GARRISON, Chief of the Bureau of Statistics

The progress of modern civilization has brought about a radical change in the character of the elements which once constituted the claims of peoples and states to the title of greatness. In the world wide family of nations, greater importance is now attached to industrial force than to merely military prowess, and the workshop with its array of intelligent and contented workmen has superseded the intrenched camp as the representative and citadel of national power.

Merely political or dynastic aggrandizement as motives for aggressive enmity among the nations of the earth scarcely now exist, even among the people who are least advanced in the march of progress, and war waged solely on such grounds, would evoke the universal condemnation of civilized mankind.

International rivalries are still as keen and perhaps keener than ever before in the world's history, but the incidental action which once found its only expression in destructive wars, is now directed toward the pacific conquests which are bringing the great forces of nature under subjection to the will of man, and making them contributory to his moral and material elevation.

Adam Smith in his treatise on the "Division of Labor" states that "the most opulent nations, generally exceed their neighbors in agriculture as well as in manufactures; but they are eminently more distinguished by their superiority in the latter than in the former."

The pre-eminence of our country as an industrial nation is recognized the world over, and the purpose in presenting the facts and figures which follow is to show that among its constituent states, New Jersey has contributed its full proportion of the sum total, and that its rank as a manufacturing commonwealth is in all respects high, and in some specially important lines of manufacture the very highest.

The history of New Jersey as a manufacturing state in the modern sense begins practically about 1860, as indeed does that of the entire country. The immense expenditures of the Civil War, the demand for supplies and material of all kinds on the part of the general government for the creation and maintenance of its armaments on land and water, the introduction of machinery on a large scale, the nationalization of the currency which gave us—instead of the paper of local banks, a form of money secured by the credit of the entire nation and of equal value in all parts of the country, were the factors that brought about a triumphant termination of the war, and laid the ground work of the immense industrial expansion which the nation has since achieved.

The extent to which New Jersey participated in this growth, and the steps by which her industrial development has attained its present imperial proportions is shown by the figures relating to capital invested, number of wage earners employed, and value of products for each of the decennial census periods since 1850, up to and including the census of manufactures taken in 1905.

Year.	Capital Invested.	No. of Wage Earners. Employed.	Amount paid in Wages.	Total value of year's product.
1850	$22,293,258	37,830	$9,364,740	$39,851,256
1860	40,521,048	56,027	16,277,337	76,306,104
1870	79,606,719	75,552	32,648,409	169,237,732
1880	106,226,593	126,038	46,083,045	254,380,236
1890	250,805,745	173,778	82,944,118	354,573,571
1900	502,824,082	241,582	110,088,605	611,748,933
1905	715,060,174	266,336	128,168,801	774,369,025

An understanding of the significance of this tremendous growth will be assisted by calling attention to the fact that in 1850 the capital invested in manufactures throughout the entire nation was only $533,245,351, which is $191,814,823, or 25.4 per cent less than the sum reported for New Jersey in 1905, while the value of our factory products of manufactured goods during the year 1905 was equal to 76 per cent of the total for the entire country in 1850.

From 1850 to 1905, a period of fifty-five years, or less than the span of two generations, the capital invested in all forms of industry in our state has grown from—using round figures, $22,000,000 to $715,000,000; the number of wage earners employed from 38,000 to 266,000; the amount paid annually in wages from $9,000,000 to $128,000,000; and the annual value of products from $40,000,000 to $774,000,000.

In 1860 there were five states that surpassed New Jersey in the annual value of manufactured goods; these were, New York, Pennsylvania, Ohio, Massachusetts and Connecticut. With the exception of Connecticut, the lead of these commonwealths over our own, ranged at that time from 100 to 500 per cent.

In 1905 New Jersey was still in the sixth position, but separated from her competitors by much narrower margins than during the earlier years, and the position once occupied by Connecticut has long been held by the great middle western state of Illinois. With this exception the rank of our state compared with those named is still relatively the same. Our percentage of increase in manufacturing industry is now, and has been for the past twenty years, greatly in advance of that shown by any other state in the Union, and at the present time we are not far from being first in per capita value of manufactured goods, in per capita amount of capital invested, and in the proportion of our population engaged in manufacturing industry.

An enumeration of the principal products of New Jersey manufactories in 1860 shows but few of the line for which our state is now famous. The list as given in the census abstract of that year is limited to flour and meal, malt liquors, cotton goods, leather, shoes, furniture, jewelry and silverware, soap and candles, and woolen and worsted goods. These wares are still produced here, and with the exception of flour and candles—in volume and value at least twenty times greater than in 1860.

The manufacture of pottery ware was in its infancy, having just been begun at Trenton, and the terra cotta, fireproofing, tile and fine brick producing plants, which now form so large a part of the industries of Middlesex, Mercer and several other counties of the middle and southern section of the state, were in 1860, almost unknown. In 1905 New Jersey ranked first among the states in these and all other lines of clay product manufactures, having had one hundren and ten large establishments in operation at that time, with an invested capital of $21,500,000, employing a working force of 13,000 men, and producing annually goods valued at $14,300,000.

In 1860, the capital invested in the silk industry throughout the entire country, as shown by the records, was, in round figures, $3,000,000, the number of persons employed was 5,500, and the total value of all goods made was $6,500,000. The chief manufactures of silk in those days consisted of ladies dress trimmings, braids, and a small quantity of ribbon. The industry, such as it was at that time, existed only in the states of Connecticut, New Jersey, Massachusetts, Pennsylvania and New York, their relative importance in the value of goods produced, being in the order here given. In 1905, there were in operation in New Jersey 144 weaving mills engaged in the production of broad silks and ribbons; 28 throwing mills for the production of organzine and tram; and twenty piece goods and commission dye houses, all running to the full limit of their aggregate capacity. Fully ninety per cent of these establishments are located in the city of Paterson or its immediate vicinity.

The capital now invested in the silk industry in New Jersey is $33,500,000, the number of persons employed averages 29,000, and the value of goods made annually, reaches the enormous total of $52,000,000. New Jersey leads all other states in the production of silk goods, and approximately forty per cent of the entire product of the nation comes from our mills. These goods are regarded as being of the very highest quality and equal in every respect to any produced elsewhere in the world.

An exceedingly interesting circumstance in connection with the history of the silk industry in America is that its beginning within what are now the territorial limits of the United States was made at Jamestown, when King James I. of England "lent his royal favor" by bestowing upon the London Company "plenty of silk worms, seed of his own store being the best;" the "seed" was sent out to Jamestown, Va., by the company as one of the means of helping the early colonists.

A partial list of other great and prosperous industries that have arisen in New Jersey for the most part since 1870, and in many of which our state occupies the highest rank, is given in the following table with the capital invested, number of wage earners employed, and selling value of their annual products, as these were reported for the year 1905:

Industry.	Capital Invested.	Number of Wage earners.	Selling value of annual product.
Chemical products	$28,153,686	[illegible]	[illegible]
Cigars and tobacco	15,230,558	7,223	[illegible]
Drawn wire and wire cloth	3,131,368	1,826	[illegible]
Electrical appliances	15,706,172	5,462	[illegible]
Food products	6,500,000	2,388	17,244,840
Foundry products	14,000,000	8,200	17,135,225
Glass (window and bottle)	4,244,150	7,664	[illegible]
Hats (soft fur)	3,465,140	5,563	[illegible]
Jewelry	6,712,774	3,091	9,733,013
Leather	11,375,000	5,616	[illegible]
Malt liquors	29,700,000	[illegible]	[illegible]
Machinery	35,836,900	19,154	31,847,150
Metal Novelties	9,890,298	6,550	[illegible]
Oil refining	34,365,982	3,683	[illegible]
Rubber products	13,263,000	5,761	[illegible]
Scientific instruments	4,500,000	3,485	[illegible]
Smelting and refining precious metals	12,190,000	3,598	[illegible]
Structural steel and iron	27,643,940	7,000	[illegible]
Woolen and worsted goods	18,270,220	8,531	[illegible]

These are only a few of the industries selected because of their magnitude, that have contributed to making the well earned reputation of New Jersey as one of the chief manufacturing states of the Union.

There are hundreds of other large industries each producing goods that run to millions of dollars in value every year. In diversity of manufactures New Jersey is unsurpassed; to enumerate all the articles produced in her factories, mills and workshops would be to name almost the entire list of things, great and small, that have been developed by modern civilization to meet the requirements of industrial, social and domestic life.

MANUFACTURES AND LIBERAL ARTS BUILDING, JAMESTOWN EXPOSITION.

The geographical position of New Jersey had prepared the way for industrial growth, and the great development of its transportation systems of steam and electric railroads, has been the next most potent factor in bringing about what has already been accomplished, and preparing the way for still greater expansion in years to come.

Side by side with these fortunate and favoring circumstances, there has been the wise policy pursued by the state in all things relating to or affecting industrial interests, the care with which hampering or disturbing legislation [illegible] avoided, and [illegible] which has al[illegible] and labor un[illegible] way powerful [illegible] New Jersey an attractive location for manufacturers who desired to conduct their business under the protection of just and equitable laws.

The magnitude of manufacturing expansion is very strikingly revealed by a comparison of the horse-power required for the operation of industry in 1870, with that in use in 1905. In 1870 there were a total of 984 steam engines, and 1,132 water wheels in use, which developed an aggregate of 58,139 horse-power.

In 1905, the number of motors of various types in use was 8,754, of which 3,474 were steam engines; 203 gas or gasoline engines; 155 water wheels; 8 water motors; 4,895 electric motors; and 19 compressed air motors. These several varieties of engines and motors were required to furnish an aggregate of 443,000 horse-power, as against only 58,139, which was sufficient for all industrial demands thirty-five years ago.

As before stated, New Jersey ranks sixth among the states of the Union in the absolute value of her annual product of manufactured goods. She is surpassed in this respect by New York, Pennsylvania, Illinois, Massachusetts and Ohio, in the order in which they are named. In the decade between 1890 and 1900, the value of New Jersey's product of manufactured goods increased 72.5 per cent. while that of her closest competitor—Illinois increased only 38.6 per cent.

That this increase is due entirely to permanent and continuing causes is proven by the fact that the five years between 1900 and 1905, shows an even greater proportionate advance, the figures being 40 per cent for New Jersey, and only 32.8 per cent for New York, our next highest competitor.

The per capita value of the annual product of manufactured goods ($361.24), and the amount of capital invested per capita ($333.57), is greater in New Jersey than in any of the other large manufacturing states, and is exceeded in both these respects only by Rhode Island, with its small territorial area, and compartively dense population.

In the proportion of population employed in manufacturing industry, our state, with 12.4 per cent, ranks third; Rhode Island, with 20.2 per cent, and Massachusetts with 15.5 per cent, occupying first and second places respectively.

During the statistical year covered by the latest report of the State Bureau of Statistics, there were 483 companies incorporated for manufacturing purposes in New Jersey, with an aggregate authorized capital of $72,407,500, or an agerage of $149,912 for each corporation. Included in this number, are such concerns only as had avowed an intention to establish their works somewhere in the state.

During the same year 90 new buildings for manufacturing purposes—most or them of large dimensions, were erected in various parts of the state at an aggregate cost, including equipment, of $5,138,000.

Another very important element of growth enjoyed by New Jersey for years back is the steady influx of manufactories from other places, principally the large cities of New York and Pennsylvania. During the year 1905, 37 such establishments were received, none of them employing less than fifty persons; these plants were attracted as others before them have been, by the advantages offered here in the form of superior transportation facilities by rail and water; low priced land for factory sites and for workmen's homes, opportunities for a comparatively inexpensive enlargement of workshops, that, as a rule, could not be thought of because of high land values in the large cities from which most of them came.

Without hampering the legitimate freedom of action of employers, New Jersey has surrounded her wage workers with all necessary and possible protection. Laws regulating the age at which children may be employed, and others providing for proper sanitation and ventilation of factories, have long been on our statute books, and the state provides liberally for carrying them out in good faith.

The Bureau of Statistics, of which the writer has, at the present time, the honor of being chief officer, was organized almost thirty years ago for the express purpose—as declared in the organic act, of "in all suitable and lawful ways, fostering and encouraging every class of productive industry." This it has consistently endeavored to do by furnishing in its long series of annual and special reports, such information as seemed most likely to advance the interests of the state, and lead to a more widely extended knowledge of the valuable industrial opportunities offered almost everywhere within her borders.

New Jersey's Educational Advantages

By CHAS. J. BAXTER, State Superintendent of Public Instruction

The number of school houses in the state of New Jersey is 1,998; they provide accommodations for 364,657 pupils. The value of the school property is $21,722,280.

1,107 men teachers, and 8,327 women teachers are employed, making a total of 9,434. Of this number 2,864 are graduates of normal schools and 732 are graduates of colleges.

Last year 381,194 pupils were enrolled; the average daily attendance was 266,917, and the schools were kept open an average of 182 days.

The total bonded indebtedness of the school districts is $6,092,954.

The following is a summary of the financial statement of the public schools.

Receipts: State school tax, $2,062,208.29; state appropriation, $1,202,419.85; state school fund, $200,000; interest of surplus revenue, $27,412.30; local tax, $7,334,065.59; district school bonds, $894,286; other sources, $88,000.

Disbursements: Teachers' salaries, $5,601,049.14; building and repairing schoolhouses, $2,058,462.63; fuel and other current expenses, $2,186,240.56; debt and interest, $191,781.67; manual training, $126,147.63; libraries, $14,136.00.

When we consider the present number of schoolhouses in New Jersey and recall the earnest and well directed efforts of the state's early settlers to bring education within the reach of their children, we realize that the foundation they laid was a most enduring one—that the seed sowed has brought forth a plentiful harvest. Nearly half the citizens of the state depreciated those early efforts. To-day our school buildings are many of them architecturally all that could be desired. Warmth in winter, coolness in summer, have been studied and attained. The systems of ventilation are perfect. Every effort is made to conserve the best interests of the child, physically, morally and intellectually. Yet education in this state had its beginning in the log cabin or schoolhouse, unplastered, with chinks between the logs wide enough for the snow and rain to beat in. Children of tender years were sent to those log cabins through forests where the cry of the wolf was not infrequently heard, and where the red men lay in wait for scalps. Those were deeds of heroism—efforts to have an education at almost any cost so valuable was it realized to be.

NEW JERSEY STATE NORMAL SCHOOL, TRENTON, N. J.

And what was the education of that early day? How few were the branches taught, how narrow the field compared with the one in which we stand, and from a mountain of books before and behind us, on our right hand and on our left we dive deeply into the studies of which they were digging out the first principles.

And what has this education done for us? This state that has so earnestly sought the great boon of education stands forth pre-eminent in her educational system.

The State Board of Education consists of two members from each Congressional District. It has control of the State Normal School, the School for the Deaf, the Farnum School, and the Manual Training and Industrial School for the Colored Youth. It appoints the county superintendents of schools, decides appeals from the decisions of the State Superintendent, and makes rules for the granting of teachers' certificates and for carrying into effect the school laws of the State.

The State Superintendent of Public Instruction is appointed by the Governor and confirmed by the Senate. He decides controversies that arise under the school law; may withhold the state school moneys from any district for neglect or refusal to comply with the provisions of the school law, and has general supervision of the public schools. He is a member of all boards of examiners for teachers' certificates.

There is a superintendent of schools for each county, appointed by the State Board of Education. The County Superintendent apportions the school moneys among the districts in his county, has general supervision of the schools, and in connection with the local Board of Education, prescribes the course of study to be pursued in the district. He is chairman of the County Board of Examiners and appoints the other members of the board.

Each municipality in the State constitutes a school district, unless by a vote of the people two or more municipalities decide to unite and form one district. There are two classes of school districts, cities forming one class and all other municipalities the other, but a district in either class may, by a vote of the people, be transferred to the other class. The members of the Board of Education in a city school district may be appointed by the Mayor or elected at the regular municipal election as determined by the legal voters, but until so determined the members shall be selected in the same manner as prior to the passage of the present law.

In order to be eligible to membership in the Board of Education, a person must be a citizen of the United States and must have been a resident of the district for at least three years immediately preceding his election and must be able to read and write. A city school district may have a city superintendent, but until one is appointed the County Superintendent has supervision of the schools.

In each city school district there is a Board of School Estimate, consisting of the Mayor, two members of the body having the power to make appropriations for city purposes, and two members of the Board of Education. The Board of Education presents its estimate of the amount of local appropriation needed, and the Board of School Estimate certifies to the body in the city having power to make appropriations, the amount to be raised for school purposes.

In districts other than cities the Boards of Education consists of nine members each, elected by the people on the third Tuesday in March. The qualifications for membership are the same as in city school districts. The special district school tax is voted either at the annual meeting or at a special school meeting called by the Board of Education. Bonds for school houses are authorized by the legal voters. Women may vote at district meetings on all questions except the election of members of the Board of Education, which is prohibited by the Constitution.

Funds for the support of schools come from the following sources: First, from the income of the State School Fund. The principal of this fund is derived almost entirely from the sale and rental of lands under water belonging to the State. The principal cannot be used for any purpose, and the income can be used only for the support of public schools. This income amounts to $200,000 per annum. Second, from State appropriation made by the Legislature to reduce the State school tax. Third, from State school tax, an amount which when added to the State appropriation will make a sum equal to two and three-fourths mills on each dollar of the taxable property in the State. Fourth, all State tax on railroad property in excess of one-half of one per cent. of the value of such property. Fifth, interest of surplus revenue, and Sixth, local school tax.

The $200,000 from the school fund is apportioned among the counties, by the State Superintendent on the basis of the total days' attendance of pupils in the public schools. The State appropriation is apportioned among the counties by the State Comptroller on the basis of the ratables. Ninety per cent. of the State School tax paid by each county is returned to it, and the 10 per cent. received from all the counties forms the reserve fund, which is apportioned among the counties in the discretion of the State Board of Education.

RUTGERS COLLEGE,
New Brunswick, N. J.

The County Superintendent apportions to each district $600 for the superintendent or supervising principal, if there be one; $400 for each assistant principal, and permanent teacher in a high school having a full four years' course; $300 for each permanent teacher in a high school having a three years' course, $200 for each permanent teacher other than those in three and four year high schools; $80 for each teacher employed over four months, but less than the time the school was in session, and $80 for each evening school teacher, $25 for each high school pupil for whom a tuition fee is paid to another district; 75 per cent. of the cost of transportation for pupils for whom a tuition fee is paid by the district and divides the amount remaining, after deducting the amount apportioned on the basis of the number of teachers employed, among the districts on the basis of total number of days' attendance of pupils.

The custodian of municipal funds is the custodian of school moneys, unless the Board of Education appoints the collector as custodian. In either case, the compensation of the custodian must be fixed by the municipal authorities and paid from municipal funds. If there are two or more municipalities in the district, the Board of Education may appoint its own custodian and fix his compensation, which then is paid from school moneys.

Each collector must pay to the county collector the amount of State school tax due from his taxing district not later than December twenty-second. If the tax is not paid by that date the County Superintendent must withhold the amount of reserve fund apportioned to the district and divide it the following year among all the districts in the county. Each county collector must pay the State school tax to the State Treasurer not later than January twentieth.

Every district must provide free text books and supplies for all pupils and must also provide a flag for each school house, which flag must be displayed every day the school is in session. The selection of a text book requires the vote of a majority of the whole number of members of the Board of Education. A Board of Education may employ medical inspectors and truant officers.

All plans for school houses must be submitted to the State Board of Education for suggestion and criticism. Every school house hereafter erected must comply with the following requirements: First, light must be admitted to the class rooms only from the left and rear. Second, the total light area must equal 20 per cent. of floor space. Third, there must be 18 square feet of floor space and not less than 200 cubic feet of air space for each pupil. Fourth, all rooms must have a proper system of ventilation which will supply 30 cubic feet of fresh air per minute for each pupil. Fifth, all ceilings must be at least 12 feet in height and all stairs must be at least four feet wide, with intermediate landings, enclosed in brick walls or by partitions of slow-burning construction, and without open wall holes. Sixth, a schoolhouse having eight rooms must have two flights of stairs, each four feet in width, or one flight not less than six feet in width, one having from eight to sixteen rooms, two flights of stairs not less than five feeet in width, and one having sixteen or more rooooms, four flights of stairs not less than four feet in width, or two flights not less than six feet in width. Seventh, all ceilings must be either metal, wood or plaster on metal laths and painted white or some light tint.

A person cannot be legally employed as a teacher unless he holds a teacher's certificate in full force and effect at the time he begins teaching. Before beginning to teach he must show his certificate to the Superintendent of Schools. A Board of Education may adopt rules governing the employment of teachers. In the absence of rules, the contract must be in writing in triplicate, one copy filed with the Board of Education, one with the County Superintendent, and one with the teacher. The employment, promotion or dismissal of a teacher requires the vote of a majority of the whole number of members of the Board of Education.

The State Board of Examiners consists of the State Superintendent, the Principal of the Normal School and a person appointed by the State Board of Education. This Board issues certificates valid in all parts of this State and in any school or grade.

The County Board of Examiners consists of the County Superintendent and three teachers appointed by him. This Board issues certificates valid in the county. The third grade certificate is valid in an ungraded school or primary department; the second grade in an ungraded school or in any grade below the eighth ;the first grade in any school in the county. City certificates are good only in the city. All kindergarten teachers must hold special kindegarten certificates. Special certificates may be issued for kindergarten, physicial training, manual training, music, drawing, ancient or modern languages, and commercial branches. All applicants for certificates must file testimonials of good moral character, and in case of previous experience, of success as teachers.

Graduates of the Normal School receive State certificates. Graduates of normal schools in other states may have their diplomas endorsed, provided the course of study pursued is equivalent to the course in the New Jersey Normal School, and the State in which they were issued grants reciprocal privileges to graduates of the New Jersey Normal School.

All children between the ages of 5 and 20 are entitled to attend the public schools in the districts in which they reside. If a kindergarten has been established, children four years of age may attend. A Board of Education must provide suitable school facilities for all the children desiring to attend school. The Board of Education may provide for the education of pupils in the higher grades by payment of tuition fees to adjoining districts. If a child lives remote from any school in the district, the Board may transport such child to school or pay for its tuition in another district. A Board of Education may close a school and transport all the children to another school. When this is done the district continues to receive the $200 theretofore apportioned for the teacher employed in the school which was closed. Children who have never attended any school can be admitted to a public school only during the ten days immediately following the opening of the school in the fall and during the first five days in January and April, except by the vote of a majority of all the members of the Board of Education.

All children between the ages of 7 and 14 must attend either a public or private school every day such school is in session, unless they are taught at home or are physically or mentally unfit to attend. The parent of a child who does not attend school may be proceeded against before a magistrate as a disorderly person. If the parent is unable to control the child, such child may be proceeded against as a disorderly person.

Corporal punishment in all public and private schools is absolutely prohibited.

SCHOOL FOR THE DEAF.

This institution which is located at Trenton, is a part of the public school system of the State, and is open to deaf residents of the State between the ages of six and twenty-one years. The pupils are instructed in the branches of common-school education, and are also trained in some handicraft.

The industrial department is larger and better equipped than in most schools of this kind. From the printing office is issued monthly a paper, the Silent Worker, which, in point of mechanical execution and of quality of contents, ranks as the best issued from any institution in the country. All the work on this paper is performed by the pupils of the school.

The wood-working department, under the charge of a graduate of a technical school of high rank, has a course in which theory and practice are united in an unusual degree.

A course of kindergarten work, especially adapted to the deaf child, has been worked out in the school, and has been followed by some of the best schools of the kind in this country.

NASSAU HALL PRINCETON UNIVERSITY.
Princeton, N. J.

A building for hospital purposes, designed in accordance with the best modern practice and ample to meet any possible need, was opened in 1899.

The attendance of pupils has risen from 125 in June, 1896, until at the present time it is about 150.

The school possesses a well chosen library, which at present contains about 3,000 volumes, and is rapidly growing.

HOME FOR THE CARE AND TRAINING OF FEEBLE-MINDED WOMEN.

This institution was established by virtue of the act of March 27th, 1888, the late S. Olin Garrison, who drafted the original law, being its first superintendent. On November 7th of the same year, he was succeeded by Mary J. Dunlap, M. D., the present incumbent. Upon organization of the first board of managers, the late Hon. Alexander G. Catell, of Camden county, was chosen president, a place he acceptably filled until his death. He was succeeded by the Hon. Benjamin F. Lee, of Mercer county, Clerk of the Supreme Court, who has since occupied the position. Mrs. Emily E. H. Williamson, of Union county, has been secretary of the board from its organization. The first treasurer was the Hon. Belmont Perry, of Gloucester county, he being succeeded by ex-Senator Phillip P. Baker, of Cumberland county; the late Senator Barton F. Thorn, of Burlington county, and George B. Thorn, Esq., of Burlington county, the present incumbent.

As its official title suggests, this institution has for its object the care and training of feeble-minded women. Its location in a peculiarly healthful and fertile portion of the State, the plan and the scope of the buildings, as well as their equipment and the employment of modern administrative methods, make the home a subject for favorable comparison with any similar institution in the country. The property consists of about 50 acres.

The most conspicuous building of the Home is that devoted to purposes of administration and instruction, including dormitories and a gymnasium. There is also a laundry, a power house, with heating apparatus, and pump for raising the sewage of the home into the Vineland system. Fire escapes and a water tower give protection to the State's wards. All the buildings are lighted with gas or electricity.

TRAINING SCHOOL FOR FEEBLE-MINDED CHILDREN.

This public institution is an outgrowth of a private one, which Prof. S. Olin Garrison established in Millville, Cumberland county, on September 1st, 1887. It was opened at Vineland, on March 1st, 1888, with an enrollment of ten inmates. Adjacent properties were soon acquired and a handsome building, costing about $18,000, was erected in 1890-91.

There are ten cottages, besides a hospital, large barns, shops and manual training rooms, located on a farm of 170 acres. The school has a fine assembly hall, seating over 600, and also containing seven schoolrooms, drill room and gymnasium.

The plan and scope of training and education by the school, require fourteen teachers in English, Kindergarten, Music, Physical Culture and Manual Trades departments, thereby indicating the special and comprehensive fields of instruction. There is also a custodial department for the idiotic, and a hospital department for epileptics.

The property is worth over $250,000, real and personal, with a debt of only $11,000. Besides very good property acquisitions at low cost, at least 150,000 have been donated to the school since its organization to aid in the current expenses, in improvements and new buildings.

On November 1st, 1905, there were 346 boys and girls in the institution.

New Jersey's Summer Resorts

ASBURY PARK—Asbury Park is a typical seashore resort. Upon its boardwalk, eighty feet in width and three miles in length one may walk for hours, inhaling the saline breezes from the ocean, which beats upon the beach only a few yards distant. One may enjoy the exhilration of a bath in the surges which break upon the sands. One may be amused in varied ways, as the fancy dictates. And all this within sight of bright flowers, green grass and the monarchs of the forest which surround the city and invade its very thoroughfares.

The city is bounded on three sides by water. In front stretches the ocean; to the north is Deal Lake, a beautiful body of water which extends from within a few yards of the ocean back into the country for some distance. It is dotted with islets and is a favorite point of resort. On the southern border is Wesley Lake, which separates Asbury Park from its neighbor, Ocean Grove.

Sunset Lake, which is also dotted with small islands, lies in the northern section of the city. These pretty lakes with Fletcher Lake, which lies to the south of Ocean Grove, are a feature of this section of the Jersey coast.

Asbury Park is a city of magnificent homes and first class hotels, which are attractive to the social element; and its entire length is decorated with plazas of floral designs, rivalling some of the most noted world attractions.

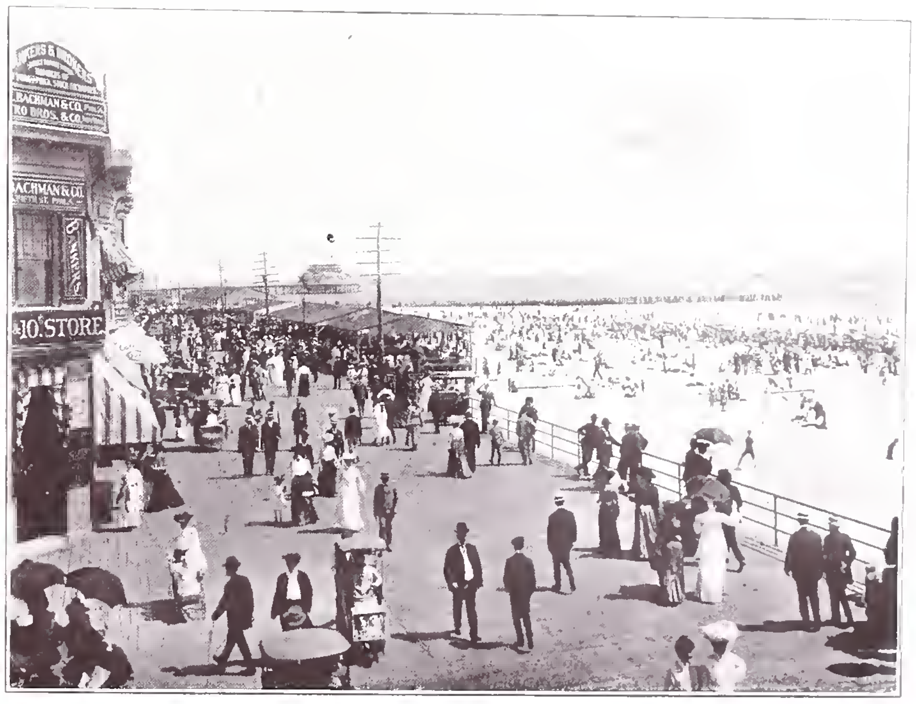
The most attractive boulevard for riding, driving or automobiling lies right on the coast and overlooking the surf, while athletic, golf and polo grounds are nearby.

ATLANTIC CITY—Atlantic City is not only the leading all-the-year-round recreation and health resort of the Eastern States, but a great national meeting ground for the assemblage of many of the business and social conventions of the country, as well as for seekers after health and pleasure. In point of the number of annual visitors and of hotels adapted to the wants of all classes of the community, from the most luxuriously inclined to those of the simplest tastes, Atlantic City stands first among the seashore resorts of the world.

The splendid service of the railroads and connections bring personally to its hospitable doors a varied throng of visitors from all parts of the United States, and, indeed, the world.

It is distinctly metropolitan, cosmopolitan and Parisian in its different phases of life and season. Elegant displays of art and bric-a-brac, magnificent hostelries and places of entertainment, together with all forms of legitimate amusement, are to be found side by side fronting the greatest esplanade in the world, from which project far out into the ocean amusement piers of unequalled extent and attractiveness.

This great steel esplanade, called the Boardwalk, which extends along the ocean front of Atlantic City, is one of its most distinctive features. It is sixty feet wide for nearly a mile, and forty feet wide for three miles, twelve feet high above the sand, four miles long, and was built at a cost of $170,000. Upon this greatest of the world's promenades, smooth as a parlor floor, city meets city; the North, the South; the East and the West, and the world proves but a small place in this age of safe rapid and luxurious travel.



THE BOARDWALK, ATLANTIC CITY, N. J.

In the spring and fall there is snappiness in the air which gives tone and spirit to the system and makes a quiet walk on the boardwalk a superb delight.

CAPE MAY—Cape May is one of the oldest and most popular watering places along the Jersey coast, and is the summer headquarters of the most aristocratic and wealthy residents of the middle and southern states.

Its hotels and boarding cottages are ample in number and well equipped to accommodate all visitors, and the beach is perfectly safe, and affords the finest bathing of any place along the shore. A Country Club, with excellent golf links, has been opened in a delightful location, adding greatly to the other attractions of Cape May.

Regarded from a hygienic and sanitary standpoint Cape May has no superior. Its climatic advantages are universally conceded. The superior qualities of its pure water drawn from artesian wells and the celebrated Cold Springs are well known, and its sewerage system is regarded as a model.

Besides being a social centre, out-of-door life is the striking characteristic of Cape May. The surf bathing is admittedly the best and safest in America. The beach is the finest. Hard as a race track it proved last year that it was one of the world's greatest speedways for the motor car, while the new ocean boulevard and the country pikes furnish the driver and the motorist with a satisfying field for operation.

WILDWOOD—Wildwood proper is placed at about the centre of Five Mile Beach, the hardest, firmest, gentlest shore upon which the billows of the Atlantic roll and break. To the north of this central town is North Wildwood and Ottens. To the southward Holly Beach and Wildwood Crest, each a distinct community or enterprise, yet forming physically a single summer town five miles long, bound together by continuous electric and steam rail lines and avenues, and to a large extent, by the splendid promenade of its boardwalk.

Nature has been touched by loving hand in the making of Wildwood. The wonderful old cedars which have survived the storms of centuries, the holly woods and mistletoes found there when the surveyors first came upon the scene, have been saved and cared for. The very name of the place is dedicated to their beauty and shade.

Upwards of seventy hotels and boarding houses accommodate the summer crowds of those who know and annually return to Wildwood. Three fine piers now extend outward into the sea from the spacious Boardwalk.

North Wildwood and Ottens now indicate all that part of the beach north of Twenty-fifth street, and including the old borough of Anglesea. The tracts which have been opened for building purposes are occupied by scores of beautiful summer homes situated upon highways well graded, having cement curbing and sidewalks and all piped for sewers, water and gas.

OCEAN GROVE—Notable as the greatest camp meeting site in the world Ocean Grove is no longer a camp meeting ground merely, but a perennial and populous city. Hundreds live here for the entire year round in the many cottages, for Ocean Grove is a town of cottages in the truest sense of the word. And hither come, at the opening of the summer season as well as at the commencement of the religious season, thousands of sojourners.

During the camp meeting days the city is crowded with transient visitors and religious representatives from all parts of the land. Many national conventions of religious, scientific and educational associations are held here during the summer months. These have served to materially increase the reputations of both Ocean Grove and its twin neighbor, Asbury Park, as refined and cultured resorts.

Nor is the city without natural advantages. The sea air is invigorating and the fine bathing is something long to be remembered. The city's ocean frontage covers a mile. It has a beautiful lake on either side; a beautiful supply of pure fresh water, and the authorities have developed its streets into elegant drives and promenades. It has a fine system of hotels, hundreds of beautiful cottages and during the season many pitch their tents in true camping fashion and live in the open air. The beach and streets are lighted by electricity.

The magnificent concerts given every summer appeal to thousands who love good music.

THE PINES, LAKEWOOD, N. J.

SEA ISLE CITY—Sea Isle City is renowned for the magnificent beach which stretches along the front of the city. Smooth, hard and broad, without a curve it is undoubtedly one of the finest of the many fine beaches of which the southern New Jersey coast is famous. To protect the town from high tides a sea wall several miles in length has been built at the edge of the beach surmounted by a broad and beautiful boardwalk.

The city was laid out and built under the personal supervision of the founder, Charles K. Landis, and is a model town from a sanitary point of view. The water supply is good and the town enjoys all the facilities of a thrifty and rapidly growing seaside city. A motor line runs between Ocean City and Avalon and a trolley railway between Sea Isle City and Corsons and Townsend's Inlets, the most celebrated fishing waters in South Jersey.

OCEAN CITY—Ocean City is reached by two railway systems, one by the way of Sea Isle Junction, and the other by the way of Tuckahoe. Both roads run trains very frequently during the summer, and each road has four stations in the city. A well equipped and modern electric road runs the full length of the city, furnishing excellent rapid transit. A belt line is to be built. A seashore road runs from Ocean City southward to Sea Isle City, Corson's Inlet, Avalon, Piermont and Stone Harbor, a ride of 17 miles most of the time in sight of the surf. Open cars are run for those who wish the salt breeze.

The ferryboats to Longport are commodious and comfortable and run every twenty minutes, making Atlantic City but a half hour distant.

ANGLESEA—Anglesea is primarily a resort for fishermen. Just off the shore are the famous Swedish fishing banks, known all along the coast as furnishing the finest sea fishing to be found in this part of the country.

Conveniently located on one of the best bathing beaches in the world, along which has been constructed a boulevard of hard gravel 75 feet wide, and extending the entire length of the borough, it affords excellent surf bathing and kindred pleasures.

AVALON—Avalon is one of the most picturesque places along the southern New Jersey coast. A hard gravel road, built directly across the meadows, connects it with one of the best fishing harbors in the country. It is bounded on two sides by salt water. It is connected with Ludlam's Beach by a substantial bridge over the waters of one of the most celebrated fishing resorts of the coast—Townsend's Inlet.

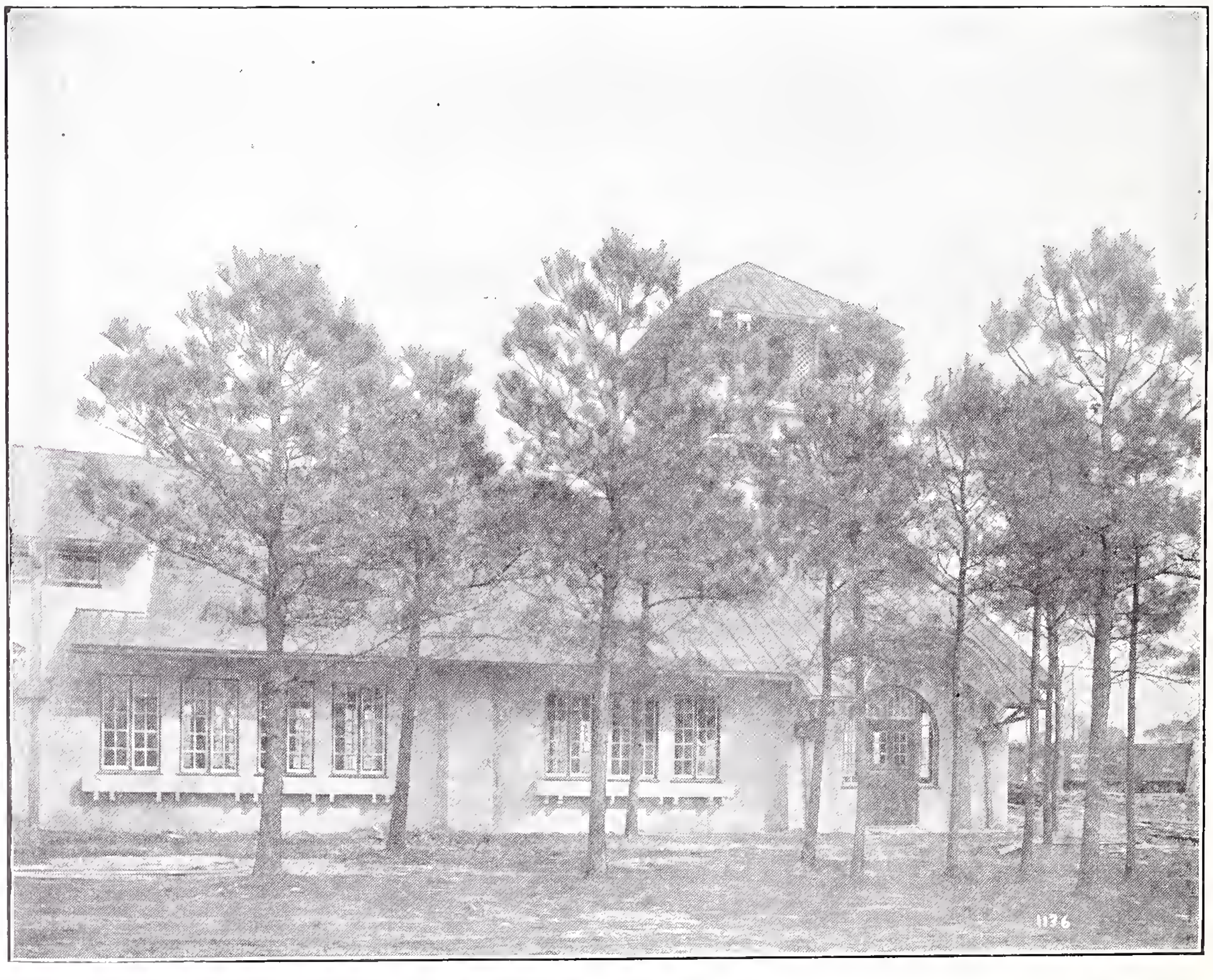
HOLLY BEACH—Holly Beach is the near neighbor, upon the south, of Wildwood. Its name is derived from the abundant growth of holly trees which, with the cedars peculiar to the section, form dense groves upon the island. In addition to a number of well appointed hotels and boarding houses the town is adorned by many attractive private cottages.

Artesian well water is supplied to all buildings. A new and complete sewer system has been completed. Along the beach front a 32 foot boardwalk extends one mile connecting with the similar promenade in Wildwood.

The electric railway traversing the town extends to the drawbridge at the Sound in one direction and northward to Anglesea in the other, thus affording a choice of fishing grounds. The sailing, angling and crabbing facilities are not excelled upon the coast.

ISLAND HEIGHTS—Island Heights, situated at the junction of Tom's River with Barnegat Bay, is one of the most charming and picturesque settlements along the Jersey coast. The sailing, boating and fishing are unexcelled.

BARNEGAT—Barnegat is one of the oldest and most celebrated settlements on the coast. It is located near the shore of Barnegat Bay.



PALACE OF COMMERCE, JAMESTOWN EXPOSITION.

Agriculture in New Jersey

By FRANKLIN DYE

The practice and profits of agriculture in the Colonial States, of which New Jersey was one, during their early history were restricted, owing to the absence of any knowledge along the lines of agricultural chemistry and the lack of suitable implements for doing the work. Agricultural machinery was not known. The simplest tools were of the crudest construction and the land was poorly cultivated. Artificial manures, (commercial fertilizers,) such as we now have were not known and the only methods of soil improvement were by resting, i. e. the summer fallow, and the supply of stable and barnyard manure, which, in most cases, was altogether too meager to maintain much less increase soil fertility. The product of natural meadows along the streams was utilized on the farms possessing such meadows but the general tendency was to soil exhaustion. Such being the case the profits from agriculture were small. Yet the farmer plodded on.

IMPROVEMENTS.

But improvements along many lines began to mark the progress of agriculture in New Jersey during the middle of the past century. In the construction of farming implements and the invention of machinery to do farm work this change was very manifest.

By way of illustration a few comparisons of what one man could do per day in the old way, by primitive methods, and in the new way, with improved implements and machinery, are herewith given, taken from "The Growth of Industrial Art," prepared by Hon. Benjamin Butterworth:

Implements.	Men.	Acres old way.	Acres new way.
Plows	1	½	20
Harrows	1	1	30
Cultivators	1	1	10
Cultivators, walking	1	1	10
Planters	1	2	12
Seeders	1	4	15
Diggers	1	½	10
Corn harvesters	1	1½	10
Hemp and flax harvesters ..	1	1½	10
Harvester cutting apparatus ..	1	1½	30
Mowers	1	1½	30
Reapers	1	1½	20
Harvester binders	1	½	20
Horse-rakes ..	1	5	30
Hay-loaders ..	1	4	25
Hay-tedders ..	1	5	40

With the improvements in farm implements and machinery there was also a steady improvement in all farm stock and this improvement is still going forward. The cow is beginning to answer the chief end for which she was made—milk production. Compare the 5,000 and 8,000 and 10,000 pound milk producer of the present with the old-time ranger browsing the dusty herbage of the wayside for a living.

Consider too, the steady improvements in the horse, sheep, swine and poultry, and the grand evolutions in fruit, vegetable and flower production. While this development in implements and machinery, stock and fruits has been going on there has been, in some localities great progress made in the knowledge of the soil and requirements of cultivation.

This has been brought about in part by the discovery of mineral manures, such as marl, of which there are thousands of acres in New Jersey, by the wider use of clover and other green crops for soil recuperation, and largely, by the discoveries of working agricultural chemists. What a vast blank of ignorance was spread over the agricultural world prior to the work begun by Liebig. The light that then began to shine has since poured its streams for the enlightenment of all agricultural workers.

The researches of the chemist have borne a most important part in agricultural progress. We now know what the crops we wish to grow and the stock we desire to keep require for best results. The sources of supply of plant-food are discovered. That which was once cast away as valueless is being used now as never before. Fifty or more years ago darkness brooded over the lands longest tilled and they were abandoned. No need of that now. The plow is turning over the old untilled acres for another trial, and, by the touch of scientific skill and improved methods, lo! they are crowned with pristine harvests.

It is but just, therefore, that we pay an honest tribute to our scientists who are co-operating with us to supply the world's needs. And to our Morrill, Hatch and Adams, who originated and carried through the measures of land-grants and appropriations to establish and maintain agricultural colleges.

There has been an increase of acreage, an average gain in yield per acre for broad areas, and a very large gain in localities for the cereals and in dairy productions, while fruit and poultry are square to the front.

How has all this advance in agricultural affairs been realized?

Man has been elevating himself by cultivating and using his intellect. In this respect agricultural progress has been very marked; in fact, intellectual progress is the basis and guide to material progress. This, developed and used wisely, is all that differentiates man from the beasts that serve him. Failing to do this he, with them, is but a plodder. And this is true of other callings also.

Greater intelligence applied to all agricultural work is the need of to-day. The chemist has revealed the laws, hitherto unknown, by which the farmer, in co-operation with nature, may secure greatest results at least cost. By the use of his intellect, by skill, by utilizing the information placed at his disposal, by better methods, one man moves forward to success on the farm, while another, failing to apply business principles and common-sense methods, loses in the game. We are face to face with new conditions. There is a revolution in thought, knowledge, business, progress. New conditions call for new requirements of fitness and ability. The tendency of human affairs is onward. The world will not wait for the man who stands still in his calling. The non-progressive man must drop out of the ranks.

THE FARMER AND AGRICULTURE IN NATIONAL DEVELOPMENT AND STABILITY.

Washington said—"Agriculture is the most healthful, most useful, and most noble employment of man," and our people are realizing the truth of Washington's estimate of the calling of agriculture.

Another, a Southern man, the Rev. Dr. Hawthorne in a sermon preached before the Farmers' National Congress held in Atlanta, Ga., October 13th, 1895, said in part:

"Agriculture is, and ever will be, the basis of all other material interests. To foster this industry is to befriend every other industry, and to cripple it is to impair every activity which contributes to the welfare of the people. The race could possibly live without manufacturers or merchants or dentists or physicians, but without the farmer it would soon become extinct. The absolutely essential thing for every human being is bread, and the production of that is the vocation of the farmer. To legislate against him is to weaken the very foundation of every lawful and useful industry. Nine-tenths of the men who have risen to enviable distinction were born and reared outside the cities. The majority of them were born in farm-houses and had some experience in cultivating the soil. Look into the catalogues of our American colleges and you will find that nine-tenths of the medalists and first-honor graduates were from the country and country villages. Without the new blood that is constantly coming in from the country, in less than fifty years the cities would be intellectually impoverished. Without a constant infusion of men and women from country churches, religion in the cities would degenerate into the deadest formalism. Let agriculture flourish, country school-houses multiply and country churches continue to be true to the faith and worship of our country fathers and mothers and our nation will be safe, prosperous and happy.

"I am confident that among the men who till the soil of this country there is more incorruptible integrity than can be found in any other element of our population. For more than two-thirds of a century agriculturists dominated the government and social life of this nation. It is now dominated by monopolists, money-lenders and speculators. We need not be told that the change has been prolific of anything but good, either to the material or moral interests of the masses of our people. It requires no prophetic gift to see that a return of the agricultural classes to power would result in a revival of that virtuous simplicity and uncompromising integrity which characterized the American people in the better days of the republic."

Rural Attractions and Productions

By FRANKLIN DYE

GENERAL STATEMENT.

It is conceded that New Jersey has a greater variety of soils and products; richer and more highly-flavored fruits, and a more salubrious climate the year through than any other State of its size in the United States.

"A Pittsburg paper having alluded slightingly to the 'sand-flats of Jersey,' Rev. J. M. Buckley, editor of the Christian Advocate, says in that paper: 'Sandflats of Jersey!' Jersey, whose agricultural products are worth more to the acre than those of any other State in the Union. Jersey, whose cranberries, strawberries, peaches, pears, plums, blackberries and grapes make the mouths of the people of the two great cities of New York and Philadelphia water from early spring to late autumn. Jersey, whose mineral resources are among the most valuable in the land; whose lofty wood-covered hills and splendid forests of pine in the south, and oak, chestnut and beech in the north are the envy of all foreigners who see them. Jersey, whose boundaries are the magnificent Hudson and the broad and majestic Delaware. Jersey, whose seacoast is the longest in proportion to its area and the most famous strip, except that of Massachusetts, from Florida to Maine. Jersey, whose northern lakes are worthy to be compared with Chautauqua, and one—Hopatcong—taking its surroundings into account, not inferior to any of the smaller lakes of America. Jersey, with Princeton University, the Stevens Institute, Rutgers College, Drew Theological Seminary, Pennington and Hackettstown, and the two finest asylums for the insane in America, to be spoken of as 'sand-flats.' Where has our contemporary lived? If he will visit the editor of this paper, at Morristown, we will open to him a new world and cause him, temporarily, to regret that fate ordered him to live elsewhere. Sand-flats, indeed!"

The surface of the State is varied; the southern counties are comparatively level; the intermediate section, rolling, inclined to hilly; the northern, hilly to mountainous. The mountainous regions are growing in popularity as summer resorts—cool, picturesque, healthful.

Mr. Will Bogart Hunter writes of Lake Hopatcong and the region surrounding it, as published in the Newark Sunday News, April 21st, 1901, as follows:

"About none of the lakes of the continent or of the world that is called New is there more of history, more of romance, more of song. Created by the Great Glacier, its rugged shores tell to the student the story of the formation of the world.

"Here the red man builded his home before the India-seeking ships of Spain turned westward from Palos. He it was who gave to it its musical name and who christened the mountains and the valleys and the singing streams.

"Within an hour's journey, in mountain fastnesses just like these, the tattered remnant of the army of freedom beat back the red-coats of England. Among these same hills iron was first made in the new world to be hurled from American guns against the hosts of Britain."

Such is the story of one New Jersey lake. The others are no less interesting in historic association.

In Morris, Sussex and Warren counties more lake beauty can be found than in almost any State in the Union. Within their borders are more than fifty lakes, nestling and hiding away in the mountains. About their shores are 200,000 acres of virgin forest.

Hundreds of visitors seek these picturesque parts and idle away the long summer days in the cool shade of hemlock and pine. Yet it can never be said of the lakes that they are overcrowded.

A tired city man can fish or loaf and smoke on the shores of a Northern New Jersey lake and not see a soul from morning till night.

Or, if he wants society instead of solitude, he can find it within easy walking distance.

New Jersey's lakes are so many and so profuse in the attractions they hold out to visitors that they can take good care of all who go to see them. They appeal to the fisherman, to the man trying to forget, to the mountain climber and above all to the nature lover.

Men and women come from all corners of America to find pleasant vacations beside the placid waters of Morris, Sussex and Warren.

The long stretch of seaside, bordering the entire eastern coast of the State from Sandy Hook to Cape May, is famous the world over for its facilities for summer sea-bathing recreation, rest and health. The multitudes of people who annually visit the sections named add largely to our consuming population, and thus a nearby market is afforded for farmers, market gardeners and milk and poultry producers.

Further exceptional markets are the great cities—New York and Philadelphia and these markets are easy of access. No State in the Union has a better system of hard roads, and no other has such a network of railroads.

Furthermore we are quite sure that New Jersey, situated, as it is, between the cities named, and because of the density of its population per square mile, affords an exceptional opportunity for young men and women of energy and purpose for success in agricultural work.

Farms in good condition and lands for colonization purposes may be secured at very reasonable prices, so that it is not necessary for intelligent home-seekers to bury themselves in regions remote from the seaboard, remote from schools, churches, social and other advantages in the newer West and South.

Any one who is willing to work and who will work intelligently any of New Jersey's productive soils, need not suffer for the good things of this life in their season. And a judicious expenditure of labor and capital will be rewarded with a reasonable profit.

Climatic conditions maintain an equilibrium that is conducive to health, both in summer and in winter. Our summer resorts are winter sanitariums as well. Atlantic City, Cape May and Lakewood in the Pines are notable examples.

FRUIT INDUSTRY.

Peaches. While peaches are produced in nearly all parts of the State and are quite generally grown for local market or home use, the sections devoted to the business, as a market industry, are chiefly in the northwestern part of the State. This particular division would be marked by a line beginning north of Trenton, thence to Summit, Caldwell, Pompton and Ringwood; of this section Sussex and Hunterdon counties lead. A conservative estimate places the value of the crop of 1900 at $1,100,000, although dry weather reduced the yield and value materially.

Apples are produced on most farms, but are more profitably grown in the northern half of the State above Trenton and in the western part of Burlington and Gloucester counties.

Pears. Monmouth, Camden and parts of Burlington and Gloucester grow immense quantities of pears. These are the chief market sections. This fruit, however, is an easy grower in most localities where apples and peaches flourish.

Strawberries, Raspberries and Blackberries are encouraged to profitable production wherever a nearby market is found, but the large commercial acreage of these fruits is in the counties of Cumberland, Atlantic and Salem.

Cranberries. The large plantations of this healthful fruit are chiefly within Ocean and (eastern) Burlington counties. The natural requirements of this plant of suitable soil and sufficient water must be met, and, where nature has not provided them, the grower must create them. The business requires careful management.

Grapes are extensively grown in Atlantic county, parts of Cape May and Cumberland. The unfermented juice of the grape, as put up at Vineland, Cumberland county, has an extensive market. In a recent year in the vicinity of Egg Harbor, Atlantic county, 35,000 gallons of wine were manufactured, and in 1892 100,000 gallons.

A conservative estimate of the areas devoted to small fruits in Hammonton, Atlantic county, and vicinity is: Blackberries, 27,000 acres; strawberries, 900 acres; raspberries, 800 acres; grapes, 400 acres; peaches, 200 acres; cranberries, 300 acres—over 5,000 acres in that one locality. There are also large acreages in the townships of Galloway, Mullica, Hamilton and Egg Harbor.

Plum-culture is increasing and many tons are annually put on the market in our fruit-growing sections.

Cherries, too, are a profitable crop, and are grown on most fruit soils. One farmer in the vicinity of Newark, who produces them with other fruit for market, sold at a very profitable price 120,000 pounds of this fruit in a single season.

Currants also grow well, and have a good market.

Huckleberries grow spontaneously in the wooded areas of the State, especially in the southern part, where forest trees are not so tall as to prevent their development. Millions of quarts of this fruit are annually gathered and marketed, and are a source of profit to owners and pickers.

POULTRY.

The lighter or sandy soils of New Jersey furnish ideal natural conditions for the poultry business. Porous, always clean, soon dry after rain, with a climate, in the southern part of the State especially, comparatively mild, and fine markets, no better location exists; and the business is large and growing. In the northern counties also poultry and egg production are found to be very profitable.

The census of 1890 gives the State in round numbers 3,000,000 chickens; other fowls, 300,000, with an annual production of eggs in excess of 8,000,000 dozen.

WHITE AND SWEET POTATOES

White potatoes are a staple crop in many counties of the State. The acreage in 1906 was 62,876, with a total yield of 9,431,400 bushels. Total value of crop for same year, at 60 cents per bushel, was $5,658,840.

The sweet potato is grown for market chiefly in the southern counties; Gloucester county producing more than any other. The annual yield in round numbers is 2,500,000 bushels.

TRUCK FARMING.

If we were asked to separate the agricultural interests of the State into three divisions they would be dairying, truck and fruit farming and poultry. Truck farming in New Jersey, owing to its proximity to large consuming populations, is immense, and a large proportion of the yearly product is conveyed to market by the farmers' teams in his own truck wagon. During summer and autumn fifteen hundred to two thousand teams loaded with New Jersey fruit and produce, cross the Camden and Gloucester ferries daily into Philadelphia, and a similar traffic prevails in the neighborhood of New York City, Jersey City and Newark. Gloucester, Cumberland and Burlington counties devote large acreages to the production of watermelons and cantaloupes, or muskmelons, of fine quality.

Being brought to perfection before shipping, their texture and flavor exceeds that of those brought to our northern markets from the far South. And the Hackensack muskmelons have a reputation for richness not surpassed by the far-distant Colorado fruit.

MARKET GARDENING.

Market gardening is a still more intensive form of crop production than truck farming, as the latter is than general farming. In this several crops are grown on the same area in a single year. Although this form of intensive farming involves much more labor and expense per acre, and a more exact experience, coupled with intelligent management, the profits are correspondingly larger. As compared with general farming, the returns from the two branches named are as five to one at least.

The growth of Philadelphia has made much of the land adjacent thereto too valuable to be used for gardening, and many of the small truckers from the Pennsylvania side have moved to New Jersey, where they secured land at lower rent, with a soil better adapted to their business.

The great system of New Jersey's macadam roads has extended the area of market gardening from twelve to fifteen miles from the cities, and land can be obtained at low prices in good localities, where every facility is afforded to enable an enterprising man to secure a good home and make truck farming profitable. Land that has long been used only for general farming responds readily to the liberal use of fertilizers, and such culture as is required to raise market garden crops and some of the results from such cheap farms have been remarkable. Within short distances of railroad stations, within the lines of free mail delivery and from twelve to fifteen miles from Philadelphia land can be bought from $40 to $75 per acre.

The total amount of produce forwarded from the six lower counties of New Jersey, in one year, will compare favorably with the total amount of produce forwarded by rail during the same period from the entire State of Florida.

There were shipped from this section in 1905 over one railroad alone—the West Jersey & Seashore branch of Pennsylvania Railroad: 96,458 crates of berries—this is equivalent to 5,086,656 quarts, 656,023 crates early tomatoes, 155,733 barrels white potatoes, 110,921 crates cantaloupes, 526,022 barrels of sweet potatoes, 95,198 barrels of peppers, 205,733 baskets of late tomatoes, 11,339 barrels and 12,502 crates of cranberries and 135,573 barrels of poultry.

In addition to the above there were shipped 222,578 sacks of oysters, 51,259 sacks of clams and 56,104 barrels of fish.

Produce can be shipped by rail to New York, Philadelphia, Newark, Jersey City, Elizabeth, Trenton, Camden, Atlantic City and its adjacent resorts; to Asbury Park, Ocean Grove and the numerous seaside cities and towns that line the most easterly coast. A large proportion of the more quickly perishable products of the farm is carted to market in the farmer's wagon. Thus a larger profit is realized by the farmer and the consumer secures his product fresh from the field.

FLORICULTURE, SEED FARMS, NURSERIES.

In commercial floriculture New Jersey makes the largest showing of any State in the Union in proportion to its size.

Of florists' establishments we have several hundred with a total square feet under glass—12th census—11,190,250.

Of seed farms the State has about forty comprising several thousand acres.

The nursery business too has an invested capital and output exceeding $4,000,000.

DAIRYING.

While, in a general way, dairying is carried on throughout the entire State, every farmer having some cows, the industry, commercially, is restricted to certain sections, and these are divided into two classes—those that cater to a local trade in our towns and cities, and those who ship the product to distant markets by railroad or dispose of it in co-operative or other nearby creameries.

The location of the larger towns and cities, as laid down on the map of the State, will indicate the districts and markets of the first-named class. The latter, those who sell to the creameries and in distant markets, shipping by railroad, are chiefly in the western part of the State. If sold at 3 cents per quart, this industry gives a return to the dairyman of [illegible] over $13,000,000 annually. [illegible] from the dairyman's wagon [illegible] that that is produced in our large [illegible] cial dairies is sold at from [illegible] cents per quart. Could we [illegible] turns from all these, the total sum [illegible] be much larger than that given. The industry is increasing in the State from year to year.

MIXED FARMING.

Having specified, briefly, the special agricultural and horticultural opportunities existing in the State, it should be said that the majority of farmers practice, to a greater or less extent, a mixed husbandry. With such a variety of soils available, diversity of production is easily possible, and, for the average farmer possessing limited means and limited experience and knowledge, this, usually, is the safer course to follow.

Special branches—unless like dairying, which covers the entire year—if not properly managed, are liable to leave a portion of the year barren of returns. The study of every farmer should be to have something coming in every month in the year, for something must go out constantly for maintenance. A line of the special industries, if desired, can be chosen, so as to obviate the barrenness indicated. Whatever line of work is decided upon should govern, somewhat, the character of the soil and location to be chosen—having always an eye for the best market for the crop to be produced.

A person unacquainted with a (to him) new locality, will also find that a visit of inspection, during the growing season, to a neighborhood in which he thinks of locating, will be of great advantage to him in determining as to the character of the soils and the crops and varieties that are the most profitable there.

ACREAGE AND VALUE OF FARMS, WITH CROP AND STOCK VALUES FOR 1906.

(From Report of Franklin Dye, Secretary State Board of Agriculture.

Number of farms of all areas in New Jersey (12th Census)	34,650
Average acreage in each farm ..	82 acres
Total value farms and improvements, except buildings —Twelfth United States Census	$93,360,930
13 per cent. increase since 12th Census	12,136,020
Buildings—Census value	69,230,080
Implements and Machinery —Census value	9,330,930
Total for State	$184,057,960

The following tables show yields of the crops named with the value for 1906, also value of live stock and poultry and eggs. Table II. from report of 1905. Table III. is given for reference.

(Continued on Page 32.)

Outline of County History, Soils and Products

Compiled by SAMUEL B. KETCHAM

ATLANTIC COUNTY.

This county was formed from the eastern part of Gloucester in 1837, and is about thirty miles long by twenty wide. Several navigable streams run through the county. Clams, oysters and fish abound in the bays and inlets. Its coast line is dotted with a number of noted summer resorts, among them being Atlantic City, which has, within a few years, gained a national reputation.

A portion of the pine region of New Jersey formerly extended over most of this county, and agriculture was but little pursued in its earlier history. The seacoast towns, having sprung up, creating a demand for small fruits, vegetables and poultry products, thousands of acres have been cleared, which are occupied by a thrifty and industrious population, and parts of the once so-called sandy desert now affords a comfortable livelihood for willing workers.

Dairying, almost unknown in this county a few decades ago, is increasing, but is unable to supply the demands in the summer season, and the popular resorts continue to receive milk from more distant points. Poultry-raising is also increasing. The demand for spring chickens and fresh-laid eggs affords a good market at the very doors of producers.

Grape-culture has for years been extensively followed, and many thousand gallons of excellent wine are made annually, besides the large quantity of grapes sold. Here, also, berries of different kinds flourish. Strawberries, perhaps, lead, yet raspberries and blackberries are grown in large quantities for the home and city markets. The cranberry, in some localities, is a staple crop. Apples and pears, with proper cultivation, thrive well. Potatoes, both white and sweet, are extensively grown, the sweets being a leading crop. And, in addition to the usual garden vegetables, tomatoes are grown to supply the several large canning establishments within the county.

BURLINGTON COUNTY.

The bounds of Burlington county were first established in 1694, but its original limits were reduced in 1710 by the formation of Hunterdon, which made the Assanpink (running through the city of Trenton) its northern boundary. It is the only county that reaches across the width of the State. It is of alluvial formation, comprised of sand, gravel, loam and clay; the surface generally level or undulating.

This county has within its bounds many of the finest farms in the State and highly cultivated. In past years its fertility was greatly increased by the use of marl, which abounds there.

The leading farm industry is dairying, and the numerous railroads, especially in the western half, make the Philadelphia markets accessible to large numbers, and the receipts from this product amount to many thousands annually. Three creameries are also located at convenient points.

Another important crop is the tomato. Large quantities are consumed in the towns along the western border, in addition to those sent to the larger cities, and, in addition to these outlets, there are five canning factories that use the entire yield of several hundred acres. One cannery devoted to canning peas and beans has proven quite successful.

Another special feature of this county is the large quantity of pork raised and marketed. For many years a large red breed has been favored, and is now widely known as "Jersey Red." Corn, oats, wheat and grass grow well; the former, on well-cultivated farms, giving immense yield. All leading fruits abound, and, such varieties as are adapted to location, give good returns.

Near the west side, along the Delaware river, truck farming is extensively practiced, and a few acres often return more money than large farms. The eastern part of the county is a sandy plain, covered largely with pine and scrub oak; the soil is light and of little value for strictly agricultural purposes. Large deposits of superior quality of clay are here found, suitable for ornamental brick and terra-cotta work.

In the midst of these sandy and pine barrens are located thousands of acres of valuable cranberry bogs, which, in the past few years, have proved to be a profitable department of fruit-raising, the berries being in large demand in all parts of the middle West and in California. This industry has made this pine district more valuable than some of the highly-cultivated farms that lie a short distance therefrom.

CAMDEN COUNTY.

This county was formed in 1844 from the northeastern portion of Gloucester. Its proximity to the city of Philadelphia and the large and growing city of Camden, where some of the largest ship-building plants of this country are locating, makes it, naturally, a desirable location for market gardening and truck farming.

As though foreseeing both the large consuming population and the crops suited to their needs that would later be needed, and that could be better grown nearby and marketed in a much fresher and better condition for that reason, nature placed a soil of sandy texture along the Delaware river border of this entire county, so that the market gardener and trucker finds a soil adapted to the production of early and quick-growing crops ready at hand.

The southeastern part of this county, also, has a soil suitable for such crops, and the quantities of produce carted to the markets named by the farmers' teams is very great. Wagons are constructed especially for this purpose, and over the fine stone roads that traverse the county loads are carried four and five times as weighty as was possible to do under former conditions. This possibility is a great annual saving in cost of cartage, fewer men and teams being required.

In the vicinity of Haddonfield the soil is well adapted for the grains and grasses, and dairying is followed extensively with other branches. Some fine herds of the best dairy breeds are located in this vicinity. With such markets at the very door of the farmer, he need not fear of having a quick and steady demand for his products, if he grows a first-class article. This should be the aim of every man who engages in any branch of the varied business of agriculture.

CAPE MAY COUNTY.

This county is the most southern limit of the State. It derives its name from Cornelius Jacobesen Mey, who, in 1621, explored the coast and gave this cape his own name. It was organized a county by proprietary law in 1692, and by act of 1710 its bounds were definitely fixed.

The soil is mostly sand and sandy loam, and, where the latter is found, agriculture has, during recent years, made commendable advancement. Grain crops are not grown extensively, but forage crops, as crimson clover, cow peas and the millets, do well, and are grown for dairy and soiling purposes. Much of the soil is well adapted to market gardening crops, and, with nearby markets and good transportation facilities to those of Philadelphia and other cities, this county, with its cheap lands, presents an inviting field for new settlers.

Cape May City has long been known as one of the oldest and most popular summer resorts in the United States. Situated upon the peninsula and almost surrounded by water gives it superior advantages for ocean view, delightful sea breezes and bathing.

Along the coast are numerous towns, all populated largely by visitors from the cities, who enjoy the summer sports of bathing, boating and fishing, the facilities for which are unsurpassed.

CUMBERLAND COUNTY.

This county formed a part of Salem until 1747, and was named in honor of the Duke of Cumberland. It is situated in the central-southern part of the State. It was settled in the early history of the State, about 1732, several families locating at Deerfield, and, in 1737, a Presbyterian church was erected. In 1775 a company of soldiers was formed at Bridgeton, marched north and joined the army of General Schuyler, of Revolutionary fame.

The surface of the county is comparatively level; soil of alluvial formation, generally sandy loam, with some clay. Along the Delaware bay is a large tract of marshy land, the northeastern part being covered with pine and small oak.

Agriculture has, from the first settlement of the county, been one of the leading occupations. The farmers are progressive, ready to change from the old methods, if better and more successful are assured.

The cereals, as corn, wheat and oats, grow well on the heavier soils, and, on the light sand, sweet potatoes, tomatoes, early peas and other vegetables are grown extensively. Several canning establishments have been operated for some years, affording a reliable and profitable market for tomato-growers.

The production of small fruits and berries of different kinds is increasing. Here the delicious strawberry attains perfection; thousands of crates are often sent daily to various markets, and, from the large centers, distributed to the smaller towns in this and other States. The raspberry and blackberry are cultivated extensively. Huckleberries grow wild and without any effort on the part of the landowner, except gathering and marketing. Grapes abound, and many acres, formerly uncultivated, are now producing grapes and wine abundantly. Watermelons and cantaloupes are market crops in some parts of the county. Dairying is extensively practiced, milk that is not consumed in the county being shipped to Philadelphia and the coast resorts.

Bridgeton, Millville and Vineland are large, thriving towns. Some of the leading glass works in the country are located at these points, which, with other manufactories in the county, employ large numbers of men and women, who consume much that is grown in the surrounding district.

GENERAL HISTORICAL SKETCH OF BERGEN, PASSAIC AND HUDSON COUNTIES.*

The territory comprising old Bergen and Passaic counties has been variously marked by its lines of civil division. Its eastern border, along the Hudson, constituted the first organized municipality in East Jersey, having been incorporated as the town of Bergen in 1658. In 1664 the township of Bergen, comprising the present county of Hudson, east of the Hackensack river, was added to it.

In 1682 the county of Bergen was erected, and included the territory east of the Hackensack from the Kill von Kull to the State line. In 1710 the county of Bergen was enlarged, and from that time till 1837, when Passaic county was set off, it included the latter, with the exception of the small part southward of the Passaic (taken from Essex), and the county of Hudson, which was set off and erected into a separate county in 1840.

During the two hundred years and upwards which preceded the last division of Bergen, while her ancient domain was yet intact, many of her most important historical events occurred. While we do not underrate the marvelous progress of the last half century, which has literally transformed the face of the whole country in a great variety of respects, yet in history that which is most ancient is most interesting. We cease to wonder at the marvels of modern phenomena because of their very abundance and familiarity, but the "forgotten lore of bygone ages" excites in the mind of the student an ever-new and fresh delight.

Bergen, in her old undivided status, passed through the phases of colonization and civil rule under the Dutch of New Netherland, with which her beginning as a settlement was practically contemporaneous; through the transition to an English colony and the government of the Proprietors of East Jersey; through the exciting scenes of the early Indian wars, the period of colonial authority under the kings of England, and the stirring events of the struggle for independence. She passed through the formative period of the State and the Nation, the the subsequent war with Great Britian, and held her territory undivided for a quarter of a century after those great events had occurred.

That portion now included in Hudson county was, in many respects, the theatre of the most important events, so far as the people of Bergen were concerned. It was the earliest settled and the nearest the center of the most important operations of early as well as of modern times.

This section, in its commercial and manufacturing importance, is second to no other district of equal extent in the State. Every year adds to it greater population, greater commercial value, and increased facilities for connecting the vastly-accumulating business of the great West with New York City, and the great warehouses for western-bound goods arriving from Europe on the New Jersey side of the Hudson must, more and more, be located here.

BERGEN COUNTY.

This county was erected in 1682, and comprised parts of Passaic and Hudson. On the west, mountainous, and on the east, along the Hudson river, the world-famed Palisades. This county is dotted over with towns, some of which are adjacent to and overlooking this beautiful river. Located near New York, thousands having occupation in that great city have their homes here.

The soil in the valleys is very productive, in a high state of cultivation, and a line of market gardening is followed, the products therefrom finding a good market at paying prices without cost of shipment.

In the northern sections of the county there is much land well adapted for all the early vegetables, small and large fruits and similar crops, which could be utilized in this way at a much larger profit than is obtained from the rotation crops, such as are produced in the West at much less expense than is possible here.

This is an inviting location to such as are inclined to truck farming.

Milk-production is receiving more attention than formerly. Improved conditions, better cows, more attention to sanitary condition of stables and intelligent feeding make it a profitable business, where, as here, it is delivered to customers by the producer.

The good railroad facilities to all parts of the county, the Palisades along the eastern border and the Ramapo mountains in the northern section make it an ideal location for the home of either farmer, artisan or the retired millionaire.

PASSAIC COUNTY.

This county was formed from the northern part of Essex and western part of Bergen counties in 1837. The surface is generally hilly, with broad, fertile valleys, except the extreme southeast, where it is level.

It is well-watered by the Passaic, Ramapo and other rivers, which not only fertilize the valleys, but are of the utmost value for water-supply and drainage to the numerous cities along their course.

In the northern part large deposits of valuable iron ore are found and extensively used in the numerous forges of that region. It derives its chief importance from its extensive manufactories located at Paterson, Passaic and other places. These are extensive and require a local population that must be fed. Tillers of the soil, even more than they now do, should take advantage of this need and supply it with fresh products of the farm, market garden, dairy and poultry yard, and not make it necessary for them to draw upon remote producers for these necessities as they are sent to the New York market. If the branches of agriculture practiced in this county are chosen with reference to the market demands, and first-class products grown, no better situation for enterprising farmers need be sought.

Dairying is a growing industry in the numerous valleys which afford abundant pasturage of excellent quality, and the demand for good milk increases with the population. Fruits of all standard varieties are grown abundantly, with a quality unsurpassed. Market gardening is profitably engaged in; the deep soil [illegible] adapted for this purpose.

Numerous lakes, fed by [illegible] the varied scenery, from [illegible] summit; the beautiful [illegible] cultivation, make it an ideal [illegible] for the care-worn [illegible] whom are now availing [illegible] joyments.

HUDSON COUNTY.

This county was formed [illegible] part of Bergen county [illegible] smallest county in the State, [illegible] about seventy-five square miles. While small in area, it is second in [illegible]. In 19[illegible] the valuation was $169,127,800, a gain over the preceding year of $7,133,500, which is a greater increase than any county in the State. Situated directly opposite America's great commercial city and possessing almost equal water facilities for the largest ocean steamers, many of the trans-Atlantic and other lines sail from Jersey City and Hoboken, where better communication is made with the Great Trunk Line railroads.

Here the Pennsylvania, Baltimore and Ohio, New Jersey Central, Lehigh Valley, Lackawanna and Erie systems have their terminals, and the larger part of the export and import commercial traffic of the United States passes through Hudson's gateway to points of distribution throughout the country and the world.

This is also the second county in population. Thousands who are employed in the metropolis have homes in its various towns, which are easily reached by steam or trolley roads.

Owing to the limited amount of land unoccupied by buildings, general lines of agriculture are not followed; but, where vacant lands are found, these are tilled by the market gardener, who often produces several crops from the same ground in a single season. The greenhouse industry is also extensive, a large amount of capital being invested and the most modern systems are used. The location being at a market where there is always a demand, insures paying, and, at times fabulous, prices for crops produced. For these reasons Hudson county affords special advantages to horticulturists engaged in this particular work.

ESSEX COUNTY.

This county was formed in 1675, and was originally larger in area. It is now the most populous and wealthy county in the State. Like other counties near the city of New York, it is covered with cities and towns. Newark, the largest city in the State, is noted for its manufacturing industries.

The northern part of the county is hilly, almost mountainous, yet these are covered with beautiful towns containing handsome residences of wealthy people, who prefer this charming section to city homes. In 1900 the taxable value of Essex county real estate was $174,505,800, with a total valuation of property taxed $210,806,300. Owing to the high value of land, general farming is practiced but little.

Dairying, however, is a leading feature in the western part of the county, and there are but few, if any, sections in the State where more cows are kept on a limited acreage than here. A demand for pure, good milk from healthy cows and cleanly surroundings has led many to improve their methods and stables, to the advantage of producer and consumer. The Fairfield Dairy, near Caldwell, with others in the county, are worthy of inspection by all students of the dairy business. Fifty men, five hundred cows and six hundred acres of land, with the necessary teams and dairy appliances, constitute the working force of the former. It is, in all of its appointments, one of the leading dairies in the United States.

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* In part from Clayton and Nelson's History of Bergen and Passaic Counties, 1882.

Market gardening is carried on to the highest perfection, producing, in some instances, three or more crops a year. The convenience of excellent home markets that consume all perishable products are advantages possessed by those only who are located near them. Fruits, both standard and the smaller kinds, grow well. Strawberries are grown in the vicinity of Newark to a high state of perfection, and bring the highest price in the Newark and New York markets, while vegetables, under the high cultivation given, produce enormously. If one desires to live in close touch with metropolitan advantages, while, at same time, enjoying the pleasures of a rural home, Essex county can furnish many desirable locations.

GLOUCESTER COUNTY.

This county was laid out in 1694, and the boundaries definitely fixed in 1710. It is of alluvial formation, and, in different parts, vegetable deposits and sea-shells have been found many feet below the surface, which is slightly undulating. The soil is generally an admixture of clay and sand, very fertile, producing grain, grass, fruit and vegetables in abundance.

Dairying has received more attention during the last few years than formerly, but is not a leading industry. Its proximity to the large cities of Camden and Philadelphia, with the adaptability of the soil for trucking and market gardening purposes, has made this line of agriculture more profitable than any other.

Here the sweet potato is grown to perfection, both in quantity and quality, and is a staple crop, this county producing about half the total yield of the State. Formerly stable manure, in large quantities, was used for growing this crop, but, in recent years, humus is obtained by green manuring and using commercial fertilizers prepared especially for it. During the harvesting season as many as eighteen carloads in a single day are frequently sent from Swedesboro station, besides large quantities from other points, which are shipped to the northern and western States.

White potatoes of early varieties are also extensively grown; the warm, sandy soil permits early planting and hastens maturity. The same conditions also favor tomato-growing; the plants being started in hot-beds, are ready for transplanting early in the season, and, under high cultivation, begin bearing before the general markets are overstocked. A difference of one week in time of ripening will often materially affect the money returns to the grower.

Melons are also largely grown, and the crop is increasing in favor. Vegetables of all the standard kinds and small fruits are extensively grown for the nearby markets, most of which is hauled in wagons to Camden and Philadelphia. To those who prefer this line of farming, with the superior advantages afforded, this county offers special inducements.

HUNTERDON COUNTY.

Hunterdon, named after Governor Hunter was set off from Burlington in 1713. Originally it comprised portions of what are now the counties of Warren, Sussex, Morris and Mercer. It is somewhat diversified with hills, table-lands and broad valleys. The Musconetcong mountains extend nearly across the northern part, and, with several distinct spurs, are sources of many never-failing streams that furnish abundant water-power.

There is a great variety of soil; the southern part, along Sourland mountain, is cold, clayey and rocky; north of this narrow strip is a beautiful, highly cultivated, rolling country, principally red shale from one to six feet below the surface, while in the more northern is the well-known limestone section.

This, like other counties in the center of the State, is largely interested in milk-production. The railroads in the northern and eastern sections carry large quantities daily to New York. Several creameries are located in its bounds, making large amounts of butter, and, being of superior quality, finds a ready market at good prices.

Much attention has been given, in former years, to raising horses. Types were selected by breeders that suited the market for size, style and speed. Perhaps no county has produced more or finer specimens of this noble animal than Hunterdon.

Sheep-raising has also been prominent, particularly raising early lambs for market. Many of these go to the shambles in February and fancy prices are realized.

For many years this has been the banner county for peach-production. So extensive has this branch become that two exchanges were formed, one at Flemington and the other at Pittstown. Through these agencies the bulk of the crop has been sold, and more satisfactory returns obtained than when forwarded to commission houses in the cities. Apples, pears and all standard fruits abound, and, frequently, where the land is too rough for cultivation, the hardier fruits grow luxuriantly.

The people are intelligent, industrious and progressive. Many of the farmers have, for years, been interested in the agricultural organizations, from which they have derived great advantages, both intellectually and financially. The hills, covered with fruit-laden orchards, and the valleys with flocks and herds, dotted here and there with attractive farm homes, present an inviting appearance to the home-seeker who has an eye both to profit and beautiful scenery.

MERCER COUNTY.

Mercer county was formed from the counties of Hunterdon, Burlington and Middlesex in 1838, and is about twenty miles long, with an average width of twelve miles. Within its bounds were fought two important battles of the Revolution, viz., Trenton and Princeton. It takes its name from General Mercer, who was killed at the latter. Hopewell was the headquarters of General Washington before the battle of Monmouth.

This county has, perhaps, better educational facilities than any in the State: Princeton University, located at Princeton; the State Normal and Model Schools, at Trenton; the John C. Green Foundation, at Lawrenceville; Pennington Seminary, at Pennington, and Peddie Institute, at Hightstown, all of which are liberally patronized, not only from New Jersey and other States, but also from foreign lands.

The State capitol is located at Trenton, as is also the county seat. This is a large manufacturing city, and with the towns above mentioned, consumes a large part of the agricultural and horticultural products, thus a good home market is afforded and transportation expenses to other places avoided.

This county is well-watered, Stony brook and Assanpink creek, with their numerous branches, running through it and emptying into the Delaware river at Trenton. The country south of Princeton and Trenton is level, of an alluvial formation, soil light, but productive and well adapted to market gardening and fruits.

North, the surface is more undulating, with a variety of soil well adapted to the growing of summer and winter grain. Dairying is now extensively followed, and, owing to convenient home markets, many retail the product, obtaining the highest price, thus receiving the entire profit. Others more distant have excellent shipping facilities and large quantities are sent daily to Philadelphia.

Three creameries are located within its bounds, which also afford additional market facilities.

There are three canning factories; these are built on the co-operative plan. Tomatoes are the chief product, and, being grown on the loamy soils, secure solidity and flavor, which gives them a reputation commanding the highest market price. While our entire State has special geographical advantages, being located between the large populous cities, this county, with its adaptation for the various branches of agricultural and horticultural work, offers superior advantages for profit and educational facilities.

MIDDLESEX COUNTY.

This county was first formed in 1682, since which its boundaries have undergone considerable alteration. It is well-watered by the Raritan river and other streams. The surface is level or undulating; soil varies from light sand to heavy clay in the northern and eastern part; the southern, embracing Cranbury and Monroe townships especially, is a gravel loam of excellent combination for grain, grass, potatoes and fruits of all kinds.

The entire county is in close touch with excellent markets by means of numerous railroads and stone roads. Both the New York and the Camden and Amboy Divisions of the Pennsylvania Railroad system traverse the county its entire length. The State Agricultural College and the College Experiment Farm are in this county, located at New Brunswick, in connection with Rutgers College.

Dr. Edward B. Voorhees, the Director of the State and College Experiment Station and Professor of Agriculture in Rutgers College, resides on the College Farm. This farm is under his immediate supervision. Its model dairy, its succession of forage crops, its several farm crops, with the experimental plots of the State Entomologist, Dr. John B. Smith, and of the Professor of Botany and Horticulture, Dr. Byron D. Halsted, afford standing object-lessons for the farmers of the State and are very valuable to them.

To those who desire to engage in the production of the staple crops—corn, wheat, rye, oats, grass for hay, potatoes and fruit, this county can furnish the very best land for such crops.

Dairying is also assuming a place as a leading industry. Farmers are realizing that it is often more profitable to manufacture their grain and hay into milk and butter for a market crop, thus retaining the fertility value of their farm crops at home, instead of allowing this to go off the farm and be replaced by commercial fertilizers.

Historically, the county is interesting. It, with some of its neighboring counties, was the theatre of the contending forces during the protracted struggle of the war of the American Revolution. New Brunswick, the capital of the county, was occupied alternately by these forces as the one or the other succeeded in gaining possession.

The present Secretary of the New Jersey State Board of Agriculture is a native of this county, as were his parents and grandparents.

MONMOUTH COUNTY.

This county was first established in 1675, but its boundaries were not definitely fixed until 1714. It was originally settled, about 1664, by the Dutch, Scotch and some New Englanders. During the Revolutionary war it suffered severely; its easy access from New York made it a favorite resort of the Royalists for forage and plunder. Within its bounds was fought one of the most important battles of the Revolution, near Freehold, June 28th, 1778. This ground, so dear to all American citizens, is now owned by Hon. D. D. Denise, who for many years was President of the New Jersey State Board of Agriculture, and to whom it owes much for its present success.

Near the battle-field stands the old Tennent Church, still preserved as it was more than a hundred years ago, and noted for its history in connection with Reverends William and Gilbert Tennent and the strife for independence of that critical period.

There are several important towns and cities in this county, and, like other counties bordering on the seacoast, is thickly settled along the ocean front. Long Branch, one of the first popular seaside resorts, with Elberon, Ocean Grove and Asbury Park, have a wide reputation, and numerous others are coming into prominence year by year.

The surface of this county is level or slightly undulating. The soil, in a high state of cultivation, produces equal with the best counties in the State. Marl, a mineral fertilizer, abounds, and was extensively used years ago and advanced the agricultural productions to a high standard, which has not been lowered. Grain, grass, fruits and vegetables grow luxuriantly. The nature of the soil is especially adapted to growing potatoes, and thousands of barrels are shipped annually to New York and other markets.

The canning business is carried on quite extensively; at Freehold one firm uses the product of 1,400 acres, chiefly peas and Lima beans.

This county also leads in the growing of the Keiffer and other varieties of pears, yielding bountiful returns when intelligently handled. Dairying is increasing, the summer resorts consuming large quantities of milk.

Among the vegetables asparagus is an important crop—near the northern coast large areas are planted and the returns range from $200 to $500 per acre in favorable seasons. Tomatoes are largely grown, both for shipping and canning. The nature of the soil produces a superior quality, which commands the highest price.

The possibilities of this and other counties cannot be determined. With a class of intelligent, progressive farmers, ready for advancement along new lines that promise well, Monmouth will continue to be one of the prominent agricultural counties of the State.

MORRIS COUNTY.

This county was set off from Hunterdon in the year 1739. It originally included Sussex and Warren. It was named after Lewis Morris, Governor of the Province at that time. The northern and western portion is mountainous, the remaining generally level or undulating.

It is well-watered by the Passaic river, with its tributaries and the north branch of the Raritan. Within its bounds are several large and thriving towns, also handsome suburban places, where many of large wealth have settled, especially along the high ridges, where land that, half a century ago, was almost worthless, is now, for this reason, most valuable. It also has large iron manufactories, the abundance and quality of the ore and its accessibility to markets have induced many interested in metal industries to locate here.

At Morristown, the county seat, the American army, under General Washington, had its winter headquarters, and, in recent years, an association has been formed which purchased the house and land adjoining that it may be preserved for its historic interest. Many interesting relics of colonial days and revolutionary times are here preserved.

This county, like others located at convenient distance from city markets and also having a large suburban population, is largely engaged in dairying, which is on the increase. Cereal crops are grown to some extent, especially those that can be used as dairy foods.

Fruits of standard varieties have for many years been grown and attained a high state of perfection. The peach finds here a soil adapted to its wants.

The growing of plants and flowers is carried on extensively. Thousands of dollars are invested in greenhouses, and some of the largest and most modern buildings in the State, for commercial purposes, are within its bounds.

To those who desire a home near the metropolis and who enjoy natural scenery found only among the hills, superior advantages are here afforded.

OCEAN COUNTY.

This county was formed from the southern part of Monmouth in 1850; located along the Atlantic coast, upon which it has a frontage of thirty-six miles, with a long, narrow beach, separated from the mainland by Barnegat bay, which has made it a desirable location for summer residents.

Numerous towns and popular resorts are scattered along the entire front, and, for those who desire the employment of refreshing sea breezes, ocean-bathing or the sport of gunning and fishing, with freedom from the conventionalties of the fashionable wateringplaces, these afford an ideal location.

The surface is level, soil mostly light and sandy. Within the past two decades more interest has been taken in agricultural pursuits than formerly. Corn is the leading cereal crop, being used for feeding the domestic animals and poultry, the latter being a prominent industry and profitable for flesh and egg-production. In the vicinity of Toms river and Island Heights, Manahawkin and New Egypt are excellent farming lands, and dairying, as well as general farming, is followed.

Small fruits and berries, with the usual field and garden vegetables, are extensively grown. Clearings in the natural pine forest, which afford protection, and a warm, dry soil give special advantages for growing early crops. Cranberries [illegible] some extent [illegible] fusion and [illegible] The fish and [illegible] profitable employment [illegible]

To those [illegible] agricultural [illegible] securing the [illegible] soft, piney air and [illegible] Ocean, like other [illegible] many attractions.

SALEM COUNTY.

This is the southwestern county of the State; its boundaries were fixed in [illegible] and included Cumberland, which was taken from it in 1748.

It is well-watered by the Salem river and numerous creeks, the former being navigable for steamboats as far as Salem.

The county is of alluvial formation and generally level. The soil, mostly sand or gravel, is frequently mixed with clay or loam.

Agriculture is the leading occupation, and the farmers are among the most progressive to be found in the State. This is largely owing to the agricultural organizations, where information is gained and a healthy emulation to intensive farming encouraged.

Dairying is the leading feature, and some of the best and most profitable dairies in the State are to be found here. Feeding balanced rations has increased the flow of milk and at less cost than by the old methods. Most of this product is shipped to Philadelphia, Camden and Atlantic City, while several local creameries are located at convenient points. This county is famous as one of the pioneer localities in the manufacture of ice cream for the Philadelphia market. Silos are being used in dairy work and the number is increasing every year.

The cereal crops—wheat, corn, tomatoes and potatoes—grow luxuriantly. Grass, both natural meadow and cultivated, yields abundantly. Sweet potatoes are raised extensively, and, where the lighter soils prevail, are one of the leading crops. Other vegetables and fruits, small and standard, do well.

Tomatoes are a field crop; the plants, grown in hot-beds, are set early, and, being well fertilized, mature their crop early; the first pickings are often forwarded to city markets, while the bulk of the yield is used by the numerous canning factories located in the county. To those who desire a diversified line of agriculture and good social advantages, this portion of the State possesses superior attractions.

SOMERSET COUNTY.

This is the most central county in the State, and was settled early by the Dutch and set off from Middlesex in 1688. The preamble to the act is both unique and interesting, to wit:

"Forasmuch as the uppermost part of the Raritan river is settled by persons whom, in their husbandry and manuring their land, forced upon quite different ways and methods from other farmers and inhabitants of Middlesex, because of the frequent floods that carry away the fences on the meadows; the only arable land they have, and so by consequence of their interest is divided from the other inhabitants of said county: Be it therefore enacted." &c.

Its bounds have been altered at different times, and the present area is about twenty-five miles long, with an average width of fifteen miles. The surface is diversified—the central and southeastern portion fairly level, the southern and southwestern hilly and the northeastern quite mountainous. The soil of the hills is mostly clay loam, the plains sandy loam and the mountain valleys limestone.

It is also well-watered by the Raritan river and its tributaries, affording excellent water-power for milling and manufacturing purposes, also natural drainage, and the bottom or meadow lands are among the most productive for hay and pasturage in the State.

From the above-quoted preamble it will be seen that the early settlers followed the pursuit of agriculture, and some of its citizens to-day are among the leading farmers in the State. The cereal crops of summer and winter grain grow well, and parts of the county that a few years ago were considered almost worthless have, under judicious and intelligent management, become highly productive.

Dairying is followed to a considerable extent, some of the product being shipped to adjacent cities, but the larger part is sold to the creameries, of which there are several —the price paid being based on the quantity of butter fat in the milk.

The raising of horses has been followed for many years, and proved a paying business for those who gave special attention to growing a class of animals adapted for city customers. Much of the land is well adapted to growing staple fruits. The steep hillsides have produced, under proper care, some of the finest peach orchards in New Jersey. Small fruits, of varieties adapted, do well, and so the different lines of husbandry can be successfully pursued.

Somerville, the county seat, is a growing, popular town, having communication with New York City, Elizabeth, Plainfield and other cities and towns east and west by both railroad and trolley. Washington's headquarters at Rocky Hill—the Berrien House—where the "Farewell Address to the Armies of the United States" was written, in 1783, and at Somerville the Wallace House, where the Indian campaign of 1778 was planned, are both within the limits of Somerset county.

SUSSEX COUNTY.

This is the northern county of the State, formed from Morris county in 1753. In 1824 its limits were reduced by the formation of Warren county from its southern portion. It is twenty-seven miles long and twenty-one broad. The central portion is undulating. The Blue mountains run through the western part and the Hamburg mountains are in the northeastern part of the county.

It is well-watered by numerous streams, which, having their source from the mountain springs, make them of a lasting nature. There are also many small ponds or lakes, some being on the summit of the mountains. Along their shores delightful summer resorts are located, and they are liberally patronized. Iron ore and zinc are found in the mountains of the east, slate of superior quality is quarried and a large amount of capital is invested in these industries.

It is also one of the best agricultural districts in the State—corn, wheat, oats and grass grow to perfection. Dairying is a leading feature. The broad and fertile valleys between the mountain ranges, with never-failing streams of water running through almost every farm, luxuriant grass, natural and cultivated, make it an ideal location for this business.

There are fourteen creameries located at convenient points within its bounds. When there is demand, at paying prices, much of the product they receive is sent to New York, and, at other times, is made into butter.

Sussex has, for many years, been noted for the raising of horses, and some of the finest horse farms in the State are to be found here. Sheep-raising, once extensively pursued, both for wool and mutton, is receiving increasing attention, especially upon farms where cultivation is difficult.

All standard fruits are grown with success. Apples, peaches and pears grow to perfection, both soil and climate being congenial. Many hillsides are now covered with productive peach orchards, and the outlook is so bright that thousands of young trees are being set annually. A drive through this beautiful country, with its charming view of hill and dale, the well-improved farms, with attractive buildings thereon, is convincing that the inhabitants are thrifty and comfortable.

UNION COUNTY.

This county was set off from the southern part of Essex in 1858. It has geographical advantages over many parts of the State. Convenient to New York, thousands find here a quiet restful location for homes, with freedom from bustle and confusion in the large cities.

Several large and important towns are within its bounds. Elizabeth, formerly called Elizabethtown, was the third settlement made in the State, and the first by the English. It was incorporated "Borough of Elizabeth" February 8th, 1739. Near Elizabeth stands "Liberty Hall," the residence of William Livingston, the Revolutionary War Governor of New Jersey.

Phillip Carteret, the first Governor of New Jersey, came to this town in 1665, made it the capital of the Province, and named it in honor of Lady Elizabeth, the wife of his brother, one of the proprietors of East Jersey. The first General Assembly of the State met here in 1668, and continued, with few exceptions, up to 1682.

The College of New Jersey, now Princeton University, was started in this town, under the direction of Jonathan Dickinson, its first President.

Plainfield, a beautiful and thriving city, with the city of Rahway and many other rapidly-growing towns in other parts of the county, give evidence of its popularity as a place to live. The surface is level in the southern half, but in the northern it is hilly. The soil varies in composition, some, sand and clay mixed with loam, and other, red shale.

Agriculture is followed on such general lines as in other adjoining counties. The convenience to markets, where milk can be delivered to the consumer by the producer, has led one-half or more of the farmers to engage in milk-production. A number of fine herds of choice-bred cattle, with improved stables and dairy barns, give evidence of progress and profit in dairy husbandry.

Cereals are not largely grown, corn being the leading grain crop, as both grain and fodder are utilized for dairy purposes. Hay, potatoes and tomatoes are leading products for the nearby markets.

Standard fruits, as apples, peaches and pears, thrive well; market gardening and truck farming also occupy a large acreage —a small plot of ground, carefully tilled, often yielding larger returns than the ordinary-sized farm devoted to the old standard crops.

The advantages possessed by the farmers of this county are good markets near at hand, a net-work of steam and trolley lines, excellent educational facilities and good roads, for either hauling produce or pleasure driving. Union county was a pioneer in the good roads movement. The "Union County law," which provided for constructing roads under a county system, using crushed stone for the surface of the road, was enacted prior to the law allowing State aid in road-building.

WARREN COUNTY.

This county, originally the southern part of Sussex, was formed into a distinct county in 1824. It is well-watered by many streams, which empty into the Delaware.

The surface is generally mountainous or hilly, with fertile valleys intervening. The most prominent ranges are the Blue mountains on the northwest and the Musconetcong on the southwest boundary. Lime is abundant, and its use of great value, when properly applied.

Within the bounds of this county are several important towns, beautiful for location, and excellent taste is displayed by the owners in the matter of general appearance and preservation.

Belvidere, the county seat, is located on the banks of the Delaware and both sides of the Pequest (the latter stream emptying into the former at this point), and has, from its settlement, been noted for the intelligence and thrift of its inhabitants.

Washington, located in the beautiful valley bearing its name, has for many years been noted for the large organ manufactories and the number and quality of the instruments made.

Hackettstown, near the southern border, is in close connection with the prominent resort of Schooleys mountain, and is the seat of Hackettstown Seminary.

Blairstown is located in the northern part, and is the home of the late John I. Blair, whose large-hearted beneficence not only founded but liberally endowed the Blairstown Academy, a school for both sexes.

Warren county has also become noted for the excellent quality of cement rock, found in great abundance, and several large establishments are now sending quantities of it throughout the country.

In agriculture Warren stands among the first. The numerous valleys contain some of the best and most productive land in the State. The drained Pequest valley, known as the Great Meadows, produces enormous crops of onions, celery and other market-garden crops. Washington valley is a rich agricultural section, and, in the growing season, with undulating valleys and hills, presents a view, in many respects unexcelled elsewhere. The hillsides, also, are almost equally fertile.

Dairying has increased during the last decade. Several creameries at convenient points consume a large part of the milk produced. Raising of horses has long been a favorite business, and the excellent type of this noble animal here developed show years of study and close attention to this particular industry.

Sheep, for many years, have been among the favorite farm animals. The hilltops, where too stony for cultivation, are well

(Continued on Page 27.)

WASTE LAND.

While presenting, in a very brief outline, the agricultural characteristics and possibilities of the several counties of the State in the preceding descriptions, we do not claim that every foot of New Jersey's soil will respond to spade and plow with enormous crops. It has its proportion of waste-land, or land not naturally adapted to agriculture, and, in this respect, does not differ from other States. But we do claim that all its productive land will reward intelligent culture and judicious management with paying crops, at near markets.

By waste-land is meant marshes and marsh-meadows, sour and wet lands, steep and rocky hill or mountain sides, and sandy plains not possessing a fruitful soil. (But even a large portion of such lands return some product of wood, stone pasture or coarse hay.) All such and similar lands may be considered as coming under the term "not naturally adapted to agriculture;" and, although such land might be brought into productiveness, it is not likely that it will be until the increased profits from agricultural products will warrant such an outlay of money for labor and fertilizers.

Through ignorance of the natural capability of such land to produce profitable crops, attempts have, from time to time, been made to cultivate and improve them, not only in New Jersey, but also in other of the Eastern States; and where such attempts have resulted in failure and desertion, such farms have been erroneously classed as "abandoned farms;" but the fact is they are not qualified by nature to produce paying crops. Strictly speaking, there are no "abandoned farms" in New Jersey.

OUTLINE OF COUNTY HISTORY SOILS AND PRODUCTS.

(Continued from Page 26.)

adapted for the production of lambs, wool and mutton. Grass and all cereal crops grow to perfection when properly cared for.

In fruits, apples and peaches lead. The natural adaptability of the soil and climate are such that, where proper care is given by the orchardist, these produce abundantly and of the finest quality. Other fruits, berries and vegetables, while not extensively grown for market crops, yield well and amply repay the intelligent gardener.

This county, like others in the northern section, has special attractions for those who delight in a diversified landscape, dry atmosphere, productive lands and the society of progressive, intelligent citizens.

Unoccupied Lands in New Jersey

By J. C. SMOCK

There are in the southern part of the State large tracts of land which are still uncleared, or covered with brushwood, and which are adapted to tillage and capable of producing large crops of small fruits and market-garden vegetables. The wood on them is mainly oak, with some pitch pine and yellow pine, and hence they are called oak lands to distinguish them from the more sandy lands and tracts on which the pitch pine grows almost exclusively. The latter are known as pine lands. The total area of cleared (farm) lands in the southern division of the State, southeast of the marl belt, is about 450,000 acres. The pine-land belts have an aggregate area of 486,000 acres, leaving at least 800,000 acres of these situated as to be accessible by railways traversing them from the large cities and also near to tide-water navigation. The maps of the Geological Survey show the location and the extent of these lands, their railway lines and their relation to the settlements already made and to the cities of the State and of the adjacent States.

The soils of these tracts are sandy and not naturally so rich and fertile as the more heavy clay soils of the limestone, the red shale and the marl districts of the State, but they are not so sandy and so coarse-grained as to be non-productive, as is the case with some of the pine-land areas. The latter are often deficient in plant-food and are deservedly characterized as "Pine Barrens," and too poor for farm purposes. The growth of wood (oak and pine), as well as chemical analyses, shows that the oak-land soils contain the elements of plant production. They are not so well suited to pasturage or to continuous cropping as naturally-rich virgin soils, hence they are better fitted for raising vegetables, melons, sweet potatoes, small fruits, peaches and pears than wheat, Indian corn, hay and other farm staples. The eminent superiority of this kind of farming in New Jersey over the old routine of wheat, hay, corn and potatoes is so well known that it is useless to do more than refer to the fact. The profitable farming is now in raising those crops which can be produced on these South Jersey soils. The success at Hammonton, Egg Harbor City, Vineland and other places is notable, and equally good results are to be had at a hundred or more places as well situated as they are. These lands are sold at a merely nominal figure, and the settler saves in capital and interest account. They are easily cleared of brushwood or standing timber, and the wood is salable in all this part of the State at remunerative prices, often producing a larger return than the original cost of the land. The soil is easily cultivated, and throughout most of the year it is possible to work. The long working season and the short and mild winter favor the arrangement of work so that all is done with the least outlay for help.

The West Jersey railway, the Pennsylvania and the Phila. and Reading Atlantic City railroad, the Philadelphia and Seashore railway, the New Jersey Southern railroad, and other branch roads tributary to these main lines, afford excellent transportation facilities for access to New York, Philadelphia and the cities of the State. The Cohansey, Maurice and Mullica rivers head well up near the northwest margins of these lands, and their navigable reaches run for miles across them. The waters of the Delaware bay and the ocean are within a few miles of a large part of this oak-land domain.

The advantages of an old-settled and Eastern State, lying between New York and Philadelphia and Baltimore, and within easy reach of these large markets, of a soil which is easily tilled and generous and quick in its response to feeding, and of low-priced lands, are such as to commend them with equal, if not greater, force than do the rich prairie soils of a New West, or the low prices and cheap lands of the abandoned hillsides of New England.

MARL.

By FRANKLIN DYE.

Marl deposits extend from Raritan bay and the Atlantic ocean southeasterly across the State to Delaware bay at Salem. Its length is one hundred miles, its breadth running from nineteen miles at the northeast point and nine at the southeast point at Woodstown. The area included in this formation is not far from 1,250 square miles.

These beds or *strata* of marl *dip* towards the southeast. They differ in mineral composition and appear to have lain without disturbance in relation to each other ever since their deposition from the ocean.

When first discovered and for many years thereafter these marls had a wide use. Some of the richer deposits were carted in wagons by farmers, during the winter months chiefly, many miles distant from the place of deposit. They were very valuable in the restoration of exhausted soils. By the use of marl, clover and other grasses were produced as never before, and with the advent of such crops the exhausted humus was restored, the soil was enlivened and quickened, crops of potatoes, wheat, hay, &c., followed, and a new and profitable agriculture took the place of sterility of soil and unprofitable work.

Since commercial or manufactured fertilizers have been made possible by the discoveries of chemistry, these mineral manures are not so extensively used, but their value is as great as formerly, and those who live near these deposits have an unfailing source of fertility near by, which costs but little, and only needs judicious application to make a good profit to the farmer who uses it.

The analysis here given is an average of five analyses of Squankum marls from as many different marl deposits near Farmingdale (Squankum), Monmouth county.

Phosphoric Acid.	Sulphuric Acid.	Silicic Acid and Sand.	Potash.
3.58	0.97	53.15	3.75

Lime.	Magnesia.	Alumina.	Oxide of Iron.	Water.
3.27	1.75	8.79	15.94	8.98

Agricultural Organizations

The oldest State farmers' organizations are the State Board of Agriculture and the State Grange, both organized in 1873, and the State Horticultural Society, organized two years later. These societies are contemporaneous and are mutually helpful. The purpose and work of the Grange are well known, and its comprehensive efficiency as a farmers' organization is acknowledged. Local farmers' club existed, however, in different parts of the State as early as 1840.

The State Board of Agriculture is organized as a representative body. The members of all agricultural and horticultural societies, farmers' clubs, granges of the Patrons of Husbandry and other agricultural associations constitute the membership.

The Board of Directors consists of—

Class A—Two members of the Board of Managers of the Geological Survey, to be appointed by said board; two members of the Board of Visitors of the State Agricultural College, to be appointed by said board.

Class B—The Professor of Agriculture in the State Agricultural College, the President and Director of the State Experiment Station, and the Master and Secretary of the State Grange, Patrons of Husbandry.

Class C—Two delegates from the State Horticultural Society, two delegates from the Cranberry Growers' Association, two delegates from the State Poultry Association, one delegate from each Pomona Grange, and two delegates from each County Board of Agriculture auxiliary to it.

The board at the annual meeting elects its President, Vice President, Secretary, Treasurer and Executive Committee; the Secretary being elected for a five-year term.

The total amount appropriated to the board by the State is $6,000 to $8,000. Out of this comes the salary of the Secretary, Treasurer and clerk hire, appropriations to State Horticultural Society and County Boards of Agriculture, and the expenses of the annual meeting, of the Executive Committee and of other committees appointed, while engaged in the duties of the board, and also expressage and postage.

From a small beginning the board has grown to be a strong, representative body, and exerts a very helpful influence in the advancement of agriculture throughout the State. It finds its duties in investigating and recording whatever concerns the agricultural interests of New Jersey. Its investigations include facts relating to the various soils of the State, their chemical and mechanical condition, their productiveness and susceptibility of improvement; the best natural and artificial fertilizers, their adaptability to crops; the best methods of rearing, improving and fattening stock, including the prevention and eradication of all forms of disease among them; the examination of new implements, and processes of working the soil and the best method of drainage; the economy of farm management as applied to market gardening, farming and forestry; the proper laying out of a farm into pasture, meadow, tilled land and woods; the location, construction and economy of farm buildings and fences; the methods and principles of beautifying rural homes, and the consideration of what legislation may be needed to secure the interests of farmers.

It seeks to maintain communication with all societies, associations and clubs organized for the above purpose in the State, to gather from them the results of their observations and experiments, and to furnish them in return results obtained from other societies or digested material drawn from a comparison of the whole of the results together.

It makes its investigations and results useful to the whole State by printing and distributing, as widely as possible, its reports and papers and the results of experiments conducted under its advice in various parts of the State.

The lecture work of the board, since 1890, has been extended and systemized by the organization of what are termed Farmers' Institutes. These are conducted during the fall and winter of each year. In addition to these, the County Boards of Agriculture, which are auxiliary to the State Board and are peculiar to the New Jersey system, hold meetings quarterly or oftener throughout the year. All the counties, except one, are organized, and local societies of agriculture, horticulture, &c., affiliate with the county boards.

The State Agricultural College and the Board of Agriculture work in harmony in providing lectures and speakers for the institutes and the county boards. By this arrangement the farmers of the State have opportunity to utilize the latest information on agricultural subjects. The growing popularity of the lecture work is a strong endorsement of its value.

In all these associations, whether boards or Granges, the subjects of farm improvement and agricultural progress are discussed, progressive ideas evolved and reduced to practice. Thus, the road question has had its greatest uplift by the farmers, and whatever progress, on safe lines, has been made is largely due to the interest they have shown.

Free rural mail delivery has been inaugurated, and numerous routes established, especially where stone and other good roads exist.

A more equitable method of taxation has been secured and other matters of like importance considered.

The board's official location is in the office of the Secretary, at the State House, Trenton. As an organization, it has nothing to do with the management of fairs in the State. These are under separate control.

OFFICERS AND MEMBERSHIP.

The State Board of Agriculture has ever had in its membership some of the best citizens, as well as the best farmers, of the State. The first President of the Board, elected in 1872, was the Hon. Joel Parker, of Freehold, then Governor of New Jersey; its Secretary, Dr. George H. Cook, State Geologist. In 1875, Ex-Governor Hon. William A. Newell of Allentown, was elected. In 1878, Thomas T. Kinney of Newark, was chosen President. In 1882, Hon. Thomas H. Dudley of Camden. In 1885, Hon. Edward Burrough of Merchantville. In 1895, the Hon. D. D. Denise of Freehold. In 1901, the present incumbent, Dr. Edward B. Voorhees of New Brunswick.

The first Secretary of the Board was, as stated, Dr. George H. Cook, State Geologist. He was succeeded by P. T. Quinn of Newark. Hon. William S. Taylor of Burlington, succeeded Mr. Quinn, and, following him, the present incumbent, Franklin Dye, who has served the Board in this capacity for twenty years.

The officers of the Board for 1907 are:

President, Dr. Edward B. Voorhees
New Brunswick.
Vice President, John T. Cox, Readington
Treasurer, Walter Heritage, Swedesboro.
Secretary, Franklin Dye, Trenton.
H. V. M. Dennis, Freehold.
Geo. E. DeCamp, Roseland.
J. M. Lippincott, Moorestown.

The last named three gentlemen, with the President, Vice President, Secretary and Treasurer, constitute the Executive Committee.

Officers of the State Grange, P. of H. for 1907 are:

Master, George W. F. Gaunt, Mullica Hill
Overseer, Charles Chalmers, Vineland.
Lecturer, David H. Agans, Three Bridges
Steward, John M. Woolman, Elmer.
Ass't. Steward, Henry M. Loveland,
Cohansey.
Chaplain, Robert M. Torbet, Paterson.
Treasurer, Charles Collins, Moorestown.
Secretary, Henry F. Bodine, Flemington.
Gate Keeper, R. M. Holley, Sussex.
Ceres, Ella Stevenson, Blackwood.
Pomona, Alice G. MacKissic,
Cape May City.
Flora, Ethel Lawlin, Wyckoff.
Lady Ass't. Steward, Laura E. Strong,
Ringoes.

Officers of the State Horticultural Society for 1907 are:

President, Horace Roberts, Moorestown.
Vice President, Elias Black, Little Silver.
Secretary, Mary W. Budd, Mount Holly.
Treasurer, George W. DeCamp, Roseland.

State Agricultural College

By EDWARD B. VOORHEES, Professor of Agriculture

By an act of the State Legislature in 1864, the income from the land-script fund for the maintenance "of a college to teach such branches of learning as are related to agriculture and the mechanic arts" was directed to be paid to the Trustees of Rutgers College, for the salaries of teachers in that branch of the college designated in the act as the State Agricultural College. The annual income to the college from this source is $5800, and, in order to meet the further requirements of the law, which provided for forty free scholarships to students from the various counties of the State, the institution was enlarged, additional professors appointed, and a farm of 100 acres bought and maintained.

In 1888 the Trustees of the college offered ten (10) extra scholarships, and in 1890 an act of the Legislature provided for an additional scholarship in each Assembly District. Under this act the State did not make the necessary appropriation to carry it into effect, and in 1905 the act was amended, which provided that the aggregate amounts due for any year for such scholarships should not exceed $15,000. Since that time the scholarships have nearly all been filled, and the State has paid to the College about $12,000 annually. More than 1000 students have been in attendance at the institution, of which over 350 have graduated. The remainder have attended for longer or shorter periods, as circumstances permitted. Nearly all of them are now engaged in industrial pursuits, and have taken prominent places in business affairs.

In 1890 an act providing for the more complete endowment and support of the colleges for the Benefit of Agriculture and the Mechanic Arts was passed by Congress. By the provisions of this act the sum of $15,000 was appropriated for the year ending June 30, 1890, and an increase of the amount by $1000 until the annual appropriation shall be $25,000. This addition to the funds of the Agricultural College was very grateful, since the early appropriation of less than $7000 had not been supplemented by any appropriations by the State Government, as has been the policy in most of the States of the Union.

In 1905, an act was passed providing for Short Courses in Practical and Scientific Agriculture, which appropriated $24,000 for equipment, and $6500 annually for maintenance. This act, however, did not become effective until 1906. A building was erected upon the College Farm, containing suitable class rooms, laboratories and a creamery. Three courses of twelve weeks each were provided, namely:—

I. Course in General Agriculture.
II. Course in Dairy Farming.
III. Course in Fruit Growing and Market Gardening.

These were begun on January 2, 1907, and continued through March 27. Thirty-nine applications were made for the different courses, which proved successful in every way. The object of these courses is to give the needed assistance to those who desire to become better farmers, more skilled stockmen, dairymen and market gardeners. The instruction in everything is practical, with the [illegible] immediately useful. [illegible] practical demonstrations [illegible] to use fertilizers, [illegible] varieties of farm crops, [illegible] to bud, graft, plant and [illegible] handle milk and cream [illegible] in general to more [illegible] farming operations. There is a [illegible] demand upon the College for [illegible] take charge of farms, dairies and orchards. The instruction given in these courses [illegible] men, capable in other respects, to take responsible positions in these lines.

The interest manifested was so great that the farmers have asked for a larger appropriation for the full equipment and maintenance, which will doubtless be granted in good time.

The full four-year course has also been reorganized and broadened, in view of the increased funds that are to become available in 1908 from the U. S. Government, for the further endowment of Land Grant Colleges.

The aim of the State College is to meet the present pressing demands on the part of the farmers for a broader education and a more detailed knowledge of the principles which govern their business, while, at the same time, maintaining its high standard as a scientific institution; and, in order that this purpose shall be fulfilled, there must be hearty co-operation, not only on the part of the farmer and his organizations, but on the part of the State, in providing liberal endowments and in exercising a fostering care.

Agricultural Experiment Stations

By Edward B. VOORHEES, Director State and College Experiment Stations

The New Jersey Experiment Stations are located in the north-central portion of the State, between the hilly region, which constitutes the northern third of the State, and the southern plain between the Delaware River and the Atlantic Oceans; one is maintained entirely by the State, the other by the National appropriation. The State institution, the New Jersey State Agricultural Experiment Station, was organized in connection with the State Agricultural College in April, 1880, in accordance with an act of the State Legislature. The New Jersey Agricultural College Experiment Station was organized early in 1888 as a department of the Agricultural College, in accordance with an Act of Congress. On organization of the College Station, the lines of experiment were divided, the chemical work being assigned to the State Station, and entomology, botany and horticulture, biology and chemical geology to the College Station, the policy being that the work of each Station should supplement that of the other.

Under the provisions of the Adams Act of Congress of 1906, further funds were made available to the College Station, which permit a broadening of the work, mainly along the line of soil chemistry and bacteriology.

ORGANIZATION.

The State Station is controlled by a Board of Managers, consisting of the Governor of the State and the Board of Visitors of the State Agricultural College, appointed by him for a term of two years, and composed of two members from each Congressional district, together with the President and Professor of Agriculture of the college. This board holds a meeting at least once a year to act upon the report of the Director and upon such recommendations as he may make. The policy has been to relegate the direction and management of the work of the Station to the Director. The officers consist of a President, Vice-President, Secretary and Treasurer. Members of the board are reimbursed for actual expenses.

The College Station is under the control of the Board of Trustees of the Agricultural College. The management of the Station is delegated to an Executive Committee of the board, consisting of seven members.

EQUIPMENT.

The Station buildings comprise a laboratory building, greenhouses and dairy-house. The laboratory is a three-story building, 50 by 100 feet, with basement and attic. The basement is of rough stone, the superstructure of brick. It was planned especially for the Stations, is well equipped for the lines of work carried on, and provides ample accommodations for offices and laboratories of the Chemist, Botanist, Entomologist, Biologist, SoilChemists, Bacteriologists and other specialists who may be engaged in experimental work. The Stations also make use of the college farm.

Five acres of land are used in field experiments with fruits and vegetables, and two acres in experiments with plant diseases. These areas were transferred by the college authorities to the authorities of the Stations in 1895, no compensation being paid by the Stations. In addition the college authorities transferred to the Stations the remainder of the farm (about 90 acres) in April, 1896. This land is used for experiments in dairy farming. The business of the farm is kept as a separate account, and the income is sufficient to pay running expenses and contribute to the cost of experiments.

In 1905 the college purchased about 7 acres of land, which is given to the Stations for experimental purposes, and in 1906 a still further addition of 37 1-2 acres was made, which will be used for forestry and other Station and college purposes. In other words, the college now provides about 143 acres of land for the use of the Stations and college.

The needs of the school will necessitate changing the policy of present farm management, owing to the demands that will be made for living equipment, i. e., pure breeds of live stock of the various kinds, and for materials, as plants, trees, shrubs, etc., grown for the use of the school.

The collection of specimens in the botanical division consists of a nearly complete set of the vascular plants of the State, represented by 7000 specimens; a catalogued mycological herbarium of about 45,000 specimens, and a set of the weeds of the world, with the seeds of several hundred kinds arranged in cases. The collection in the division of entomology is in two parts—a systematic series and an economic series.. In the systematic series are over 5000 species, represented by at least 75,000 specimens. The economic series is very complete, and represents all of the usual injurious insects occurring in the State, in all stages, with specimens of the injury caused by them. Each subject studied is illustrated as far as possible or necessary by microscopic slides, and of these between 3000 and 3500 have been accumulated. The division has also nearly 900 lantern slides, illustrating a great range of subjects in economic entomology. Station workers have access to the college museum, which is very well supplied with mineralogical specimens. The library contains over 3500 works on agriculture and related sciences, besides all of the leading American and foreign scientific journals, and the college library contains upwards of 60,000 volumes.

The Stations are well equipped with modern scientific appliances and apparatus, a number of pieces of which have been devised by Station officers.

FINANCIAL SUPPORT.

The income of the State Station is derived from an appropriation by the State for maintenance. The income of the College Station is derived from the National fund. The income of the Stations during the present fiscal year is as follows:

State Station, regular appropriation	$20,000.00
for inspection of feeds	3,000.00
" inspection of Paris Green	500.00
" printing bulletins	1,500.00
" mosquito extermination	10,000.00
" oyster propagation	200.00
College Station, United States appropriation	22,000.00
Total	57,200.00

The State Station is charged with the inspection of commercial fertilizers, commercial feeds and paris green. The Station also devotes considerable time and attention to the analysis of standard fertilizing materials, waste products and special fertilizer mixtures. The primary purpose of this work is to inform the farmers of their composition and the relative cost of the constituents in them and in regular brands of commercial fertilizers. The New Jersey Stations were the first American Stations to advocate the home-mixing of fertilizers.

The investigation of mosquito-breeding areas and means for eradication of mosquitoes have been added to the duties of the entomologist, through various appropriations that have been made for this purpose.

The scientific investigations of the Stations have been mainly in the interests of dairy husbandry and horticulture, which are the principal branches of agriculture in the State. A division of horticulture was not organized as such until 1895, although investigations in the interest of this industry along the lines of plant diseases and entomology have received a great deal of attention since the organization of the College Station.[*] Immediately upon the organization of the horticultural division, it set about making a statistical survey of the fruit interests of the State preliminary to determining upon lines of experimental work.

These now include studies of varieties of fruits and vegetables, experiments with fertilizers, and methods of cultivation and marketing of the various fruits. The areas being located both at the College Farm and in different parts of the State.

The work in dairy husbandry is along lines of economics of the dairy. It has to do with the crops best suited for dairy farming, the cost of production, their relative value, rotations and methods of preservation. Considerable attention has been paid to the strictly business side of dairying, such as the influence of quality, as represented by cleanliness, etc., upon the salability of milk and cream. A large number of feeds, fodders and farm crops have been analyzed, among which were a number of the newer forage crops grown especially for soiling purposes.

The Station has always taken a prominent part in the development and improvement of chemical methods, having for their object the shortening of chemical process without lessening the accuracy of the results. Among such have been studies on methods for determining total nitrogen from nitrates and on the availability of organic nitrogen. In co-operation with the United States Department of Agriculture, the Station investigated the changes which ocur in the composition of maize, oats, wheat and buckwheat in breakfast foods in the various methods of preparation. Studies were made on the bread-supply of a few of the larger cities of the State, the object of which was to secure information concerning the chemical composition of bread, to ascertain the relation of the weight of bread to the selling price of the loaf, and to study the changes which occur in the baking of bread and the relative cost of nutrients in bread and in flour.

In 1898 the Station began a scientific investigation of manures and fertilizers, with special reference to the availability of different forms of nitrogen, including fresh and leached manures, and the three leading forms of nitrogen in concentrated materials, as nitrates, ammonia and organic. These experiments have been of very great interest, and are now being broadened in their character, so as to include the needs of eight types of soils representing those located in the lower half of the State. These investigations include both a study of the chemical, physical and biological changes that take place in the soil in addition to the question of availability of the plant-food ingredients.

The entomologist has made important investigations on the peach borer, strawberry roller, asparagus beetle, rose bug, sinuate pear borer, certain katydids, the horn fly, potato-stalk borer, pear midge and tulip soft scale. Monographic accounts have been published of the insects attacking the cranberry, blackberry, cultivated Curcurbitaceae, sweet potato, city shade trees, and a general history of plant lice, with methods of treatment, has been prepared. The life history of the squash bug, apple plant louse and a number of the more usual garden pests have been worked out, and means of repression suggested. Experiments have been carried on to ascertain, if possible, the reasons for the resistance of wire-worms to insecticides.

Special attention has been given to a study of the San Jose, or pernicious scale, and remedies for its suppression. This Station was the first to call attention to the use of soluble oils for scale pests.

In the botanical division the most attention has been paid to investigations of diseases of the sweet potato and of greenhouse plants. It has been shown that probably the blight of the eggplant is identical in nature with one of the diseases of the sweet potato. Experiments in the treatment of the sweet potato decay have shown that sulphur or kainit may be effectively used. Among the diseases of greenhouse plants that have been studied may be mentioned a fungus disease of the violet and root galls. Field experiments have been made with various substances, with a view to finding a remedy for the cranberry scald. A serious disease of the bean was shown to be due to bacteria. A common disorder of cultivated roses was found to be due chiefly to root galls and anthracnose.

The diseases of the sugar beet have been studied, and it has been shown that Bordeaux mixture will, in a large measure, prevent the leaf spot. Experiments in pruning and the application of manures and fertilizers for eradication of pear blight are in progress. Field and laboratory experiments have been made with the asparagus rust, and Bordeaux mixture has been shown to be an effective remedy.

Experiments have been made with different fungicides on a large number of fruits, vegetables and ornamental plants. Bordeaux mixture was taken as a standard, with which three other compounds were compared, the lime being replaced by sulphur, potash and ammonia, respectively. Experiments made to test the susceptibility of various plants to disease showed that they differ greatly in this respect.

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[*] The first compilation on entomological subjects, in connection with State work, was prepared by the Secretary of the State Board of Agriculture, Mr. Franklin Dye, in 1886, and was published in the Annual Report of said Board, in 1887. It was entitled "Entomology: comprising Cuts and over two hundred Delineations of Various Insects, with some General Truths in Applied Entomology." Prof. Geo. D. Hulst was chosen Entomologist of the Station in 1887.

A study has been made of the weeds of the State, particularly with reference to their means of dissemination, including propagation by underground parts, and a check list of the weeds of North America has been prepared. The relative aggressiveness of different weeds is being tested experimentally on a small plat. Experiments have been made with a fungus enemy of the thistle. The subject of poisonous plants has received some attention.

In recent years the botanical division has devoted most of its energies to plant breeding. Many new varieties of vegetables have been established and distributed throughout the State. Particular attention has been given to sweet corn, lima beans, egg plants and tomatoes.

The Biologist has made original investigations on tuberculosis. The question of what constitutes a tuberculous reaction has been studied, and a revision of previous practice made in the direction of greater accuracy. Observations on the normal temperature variations in cows led to a more accurate determination of the extent to which the injection of tuberculin affects individual animals. In experiments to determine whether healthy cattle are injuriously affected by being subjected to the tuberculin test, no such effect was observed. It was also shown by experiments that with cattle in the first stages of tuberculosis, repeated injections of tuberculin tend to cure the disease. The prevalence of milk fever and infectious abortion in the State have been investigated. Studies have been made on the germ content of milk, as found in the udder, and at various stages from the time it is drawn from the cow until it is bottled.

The biologist is now making a study of the von Behring method of immunizing cattle against tuberculosis, and the scientific propagation of oysters—the latter work being done under a special appropriation of the State.

DISSEMINATION OF INFORMATION.

The bulletins of both Stations are issued in the same series. In the regular series 202 have been issued, and in a special series 20, lettered from A to T, inclusive. The State Station has issued 27 annual reports, and the College Station 19, which, however, have been bound in the same volume since the establishment of the latter Station. The reports contain a full account of all work to be reported on for the year.

The mailing list contains nearly 10,000 names, all of which were placed there by the personal request of persons receiving the bulletins. The Director, Dr. Edward B. Voorhees, is the author of a work on "The First Principles of Agriculture," another on "Fertilizers" and "Forage Crops." The Entomologist, Dr. John B. Smith, is the author of a work on "Economic Entomology." The correspondence amounts to about 10,000 letters a year. Members of the staff also take a prominent part in farmers' meetings throughout the State.

The general results of work are thus summarized in a Report on the Work of the Experiment Stations of New Jersey, by Dr. A. C. True, of the United States Department of Agriculture:

"The agriculture of New Jersey is intensive, and hence fertilizer problems are of primary importance. The numerous investigations of the State Station along this line have been well known, and the management of the fertilizer control has been very successful. The work in horticulture and dairy husbandry is noteworthy for the systematic way in which it is conducted and for the practical value of the results obtained. To a high degree the Station has been successful in meeting the requirements of the farmer in the field and in obtaining his approval and cordial support for the Station. The investigations in biology—those of the Botanist, Entomologist—likewise have their starting-point in practice, and follow the same systematic methods, but with the addition of the strict analytical methods of science. The results obtained are in many cases of scientific importance, while their practical value and the popular approval with which they have been received show that the original purpose of the investigations have not been lost sight of.

"The Stations continue to keep in touch with the farmers of the State by the frequent attendance of their officers at farmers' institutes. The success of the New Jersey Stations in gaining the confidence of the farmer, and in modifying his practice by getting him to make application of the results of their work, is very noteworthy."

FORESTS

By ALFRED GASKILL, Forester, Forest Park Reservation Commission

Practically the entire upland of New Jersey was orginally wooded. From the virgin forest the early settlers won the fields and pastures on which the commonwealth was founded. But the making of homes and industries has not destroyed all the forests, nor have fire and wasteful cutting exhausted the power of the land to produce them. New Jersey is still a forest State and always will be, for a large part of its surface is better adapted to growing trees than to anything else. This is fortunate, since it brings the people into close touch with one of nature's strongest influences, while contributing to their material needs. Economists assert that a well-ordered community should have at least twenty-five per cent of its territory in forest. New Jersey has forty-six per cent, though it must be admitted that much of it is in poor condition.

The forest area of the State may be classified as follows:

Deciduous forest, composed chiefly of chestnut and various oaks	740,640 acres
Pine areas, containing chiefly pitch pine	1,191,579 acres
Swamps, containing chiefly white cedar, or pine and hardwood	137,600 acres
Total	2,069,819 acres

The total number of acres in forest, the acres of cleared farms, 1,977,042 (Census 1900), and the population of the State, 2,144,134 (Census 1905) are so nearly alike that it may be said there is one acre of farm and one acre of forest for each inhabitant. Two centuries of occupation have naturally brought about the removal of the virgin forest; that which replaces it is less impressive, contains few large trees, yet it is of the same species and has the same power to serve the people.

The character of the woodlands varies with the topography and the soil. In the north the land surface is broken or mountainous. The rich bottoms have been cleared and occupied by farms, villages and cities, while the forests are restricted to the mountain slopes and to small areas connected with the farms. In the south the situation is reversed. There the surface is nearly level, the soil less adapted to agriculture, and great areas are consequently given over to trees. This physical difference in the two sections is reflected in the composition of the forests. Those of the north are almost exclusively of deciduous trees, chestnut, various oaks, hickories, maples, birches, beech, ash and tulip poplar being the most common. Those of the south on the contrary are made up chiefly of pines with some oaks intermixed, and, along the rivers, of swamp growth in which white cedar predominates. The following table shows in a general way the area and character of the forest in each county and, for comparison, the area of improved farm land.

Forest and Improved Farm Land by Counties:

	FOREST			IMPROVED FARMS
County	Acres	Per cent of upland	Principal growth	Acres
Atlantic	271,638	88	Coniferous	32,954
Bergen	57,591	49	Deciduous	46,776
Burlington	303,777	59	Coniferous south Deciduous north	190,871
Camden	66,588	48	Coniferous east Deciduous west	55,370
Cape May	80,851	73	Coniferous	24,387
Cumberland	166,264	62	Coniferous east Mixed west	101,830
Essex	24,239	32	Deciduous	18,975
Gloucester	74,818	37	Coniferous, Deciduous and Mixed	117,554
Hudson	713	05	Deciduous	1,928
Hunterdon	39,481	14	Deciduous	208,986

Mercer	15,829	11	Deciduous	108,747
Middlesex	60,164	31	Deciduous	96,782
Monmouth	89,711	30	Deciduous north Coniferous and Mixed southeast	155,716
Morris	140,101	46	Deciduous	118,212
Ocean	313,087	87	Coniferous	40,141
Passaic	75,204	60	Deciduous	28,721
Salem	50,057	27	Deciduous, except extreme east	135,727
Somerset	28,613	15	Deciduous	140,436
Sussex	136,538	40	Deciduous	178,431
Union	14,350	23	Deciduous	20,483
Warren	60,205	26	Deciduous	154,015
The State	2,069,819	46		1,977,042

The value of this great possession may be measured in several ways. According to the Census of 1900, the forests of the State yielded in that year 2,328,069 dollars worth of crude material. This figure is greater than has been returned by any Census since 1879 and indicates an actual increase in productiveness at a time when the forests of most States are becoming exhausted. In other words, New Jersey possesses in its forests a resource that even in their present neglected condition is well worth considering. If the owners of this property, whether in large or small tracts, shall care for and develop it at least three times the present income may be had. This statement is supported by reference to the earning power of small forest areas within the State and to that of similar forests in other countries. More than this, the dense population of the State, its many industries, and the nearness of the forests to good markets, give an assurance of ready sale for all forms of lumber. Proof of this is found in the ordinary stumpage prices,—stumpage being the net value of timber standing uncut in the woods. Again from the Census of 1900, the average value of stumpage in New Jersey was $3.93 per thousand feet, a rate exceeded by that of only a few States, and 80 per cent greater than the average for the United States. The figures for several representative States and for the United States are as follows:

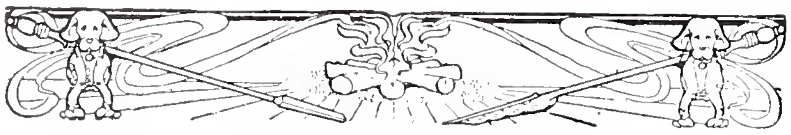
Stumpage prices in 1900.

New Jersey	$3.93	Georgia	$1.01
Pennsylvania	2.94	Oregon	.66
New York	3.12	Indiana	5.39
Massachusetts	2.64	United States	2.18

The lumber produced in this State is not of the high grade derived from virgin forests, yet, since the product of the latter, as in Georgia and Oregon, is of less value per unit than that of New Jersey, the fact cannot be regretted. Box boards, rough building lumber, railroad ties, electric poles, have the greatest present value, they can be grown in a comparatively short time—from 20 to 40 years—and their production well suits the labor conditions that obtain in the neighborhood of the forests.

Other great values that the forests have, and these are not less than that which attaches to them as wood producers, is in their control of the surface waters, in their effect upon the climate, and in their importance to the landscape. In all parts of the State, but particularly in the northern counties, growing communities are reaching out to the forests for their water supply in the assurance that a forested source helps the flow both in quantity and quality. In this way alone the woodlands are of inestimable value. As a climatic factor the forests are important. On level ground they break the force of the wind, and in the hills they retard the melting of the snow and thereby lessen the danger of freshets. Everywhere they serve to modify extremes of temperature. Of rainfall the State has enough; forests are its result rather than its cause. New Jersey is fast developing a great number of resorts whose chief attractions are the forests that surround them. These places are found in the pines of the south, as well as in the hills of the north; they are important to the whole people in affording retreats from the heat and restraint of the cities.

The State authorities are fully committed to a policy of forest preservation and forest development. Under the State Board of Forest Park Reservation Commissioners, of which the Governor is ex-officio chairman, and the State Geologist executive officer, a fire service has been organized which is doing effective work for the control of the fires that destroy so much property every year. A professional forester is also retained to advise forest owners in the proper management of their property and to give instruction in forestry in various ways. This he does without charge except for his actual expenses. The Commission is also acquiring land in various parts of the State for the creation of forest reserves. These reserves are to furnish object lessons in forestry and to demonstrate the practicability of maintaining forests for profit. By establishing them the State declares its belief in the wisdom and necessity of keeping a considerable part of its area under forest. They may be used freely by the people for their pleasure, yet that use will not interfere with their management for profit. As fast as the trees mature they will be cut and sold,—always of course with a view to the perpetuation and improvement of the forest. The State reserves now embrace about eight thousand acres and the legislature has provided money to buy considerable more. It is not expected that the State will ever own all the forest; it will gradually acquire a reasonable amount, and will encourage those who own the rest to manage it for the highest revenue. Soil, climate and market conditions are so favorable that forest land in any part of New Jersey is capable of yielding an income or rent equal to that of many farms.



RURAL ATTRACTIONS AND PRODUCTIONS.

(Continued from Page 21.)

TABLE I.

Crop.	Acreage.	Yield per acre	Total Yield	Price per bushel	Total Value.
Corn	275,000	41 bu.	11,275,000	.54	$6,088,500
Wheat	104,673	20	2,093,460	.70	1,465,422
Rye	70,000	17.2	1,204,000	.56	674,240
Oats	63,143	30	1,894,200	.38	719,786
Buckwheat	13,005	17	221,085	.56	123,807
Hay	424,568	1½ tn.	636,852	$15.00	9,552,840
White Potatoes	62,876	150 bu.	9,431,400	.60	5,658,840
Sweet Potatoes	20,588	170	3,499,960	.65	2,274,974
					$26,558,409

TABLE II.

Miscellaneous Vegetables and Fruits	$11,069,805
Milk	13,052,480
Live Stock	24,391,247
Poultry and Eggs	2,204,120
	50,717,652
Total	$77,276,061

TABLE III.

A comparative statement of crop yields and farm stock in New Jersey for seven consecutive years, not including beef sold on the hoof nor young stock, as calves, lambs and pigs.

1900	$43,303,847
1901	50,789,029
1902	62,231,964
* 1903	58,998,525
1904	68,767,971
1905	73,013,963
1906	77,193,079

* Hay, wheat and corn reduced by severe early drought and fall flood.

The Growth of Camden

A little more than two centuries ago the fertile lands now covered by the beautiful and prosperous city of Camden were first permanently occupied by white settlers. During the century succeeding this event, New Jersey, as well as all the other American colonies, was under control by the British Government. About the time the great struggle between the colonies and their mother country began an enterprising and progressive descendant of one of the first settlers conceived the idea of planning a town on the east bank of the Delaware River opposite what was then the largest city on the American continent.

In 1773 Jacob Cooper laid out into a town plot forty acres of the present territory, and named it Camden, after Charles Pratt, first Earl of Camden. The town extended only from Cooper to Arch Street, and from Delaware to Sixth Street.

The first settlers in Camden were Friends, and as would be surmised, they built the first place of worship within her territory. The brick meeting- house on Mt. Vernon Street, above Mount Ephriam Avenue, was built in 1801, and is Camden's oldest church. The Methodists followed in 1810 with their brick church at the southeast corner of Fourth and Federal Streets, yet standing as the stores into which it was converted.

The license for the first ferry across the Delaware, between Philadelphia and the present Camden, was granted by the Court at Gloucester, then the county seat, on January 1st, 1683, to William Royden

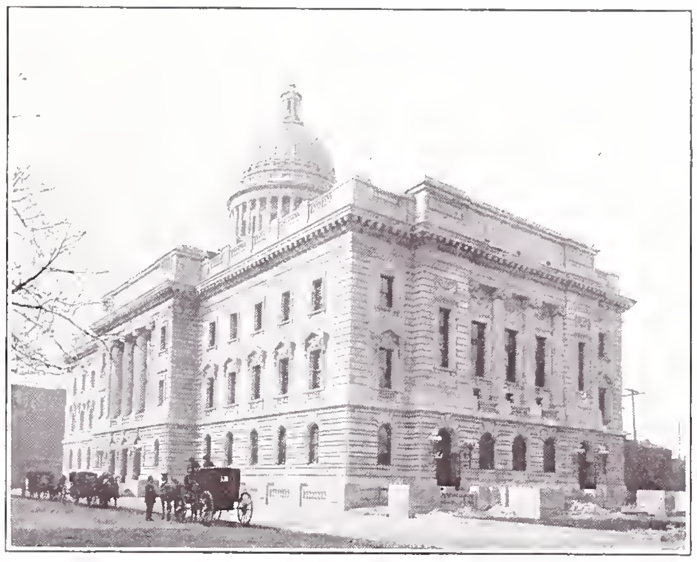
When incorporated, the city had three wards—North, Middle and South—and consisted of three villages, Cooper's Point, or William Cooper's Ferry, Camden and Kaighn's Point or Kaighnton. Each was separated by cultivated farms, and each occupied only a fringe of territory along the river front, all the rest of its territory being farm or woodland.

The first portion of Camden's territory to be named was Pyne Poynte, so called from the pine forest that covered it.

In Camden's early years there was quite a woods of dogwood trees on Federal and Market Streets, extending eastward from a little beyond Seventh Street to Tenth Street, and when a village sprang up there it was called Dogwoodtown. The last of those Dogwood trees stood in the Friends' Meeting House yard until 1906, when it died and was removed. It was said to be the largest dogwood tree in the State.

COOPER HOSPITAL, CAMDEN.

Several dwellings in the city are landmarks of over a hundred years old. The old yellow house at Point and Erie Streets, built in 1734, as the stone in its gable end mutely testifies, was the headquarters of the British General, Abercrombie, while Philadelphia was occupied by the British during the Revolutionary War. The one-and-one-half story stone house occupied by the Pyne Poynte Library is probably older than that old yellow house, but there is no date of the day of its erection. The Hall homestead, No. 22 N. Front Street, was built in 1787. The old Kaighn homestead, so altered that every trace of its former architecture is lost and constituting now two dwellings at the southeast corner of Second and Sycamore Streets was built between 1700 and 1710. The old stone farm house on the river bank just below Jasper Street, the birthplace of Isaac Mickle, author of the classic Reminiscences of Old Gloucester, is much more than a century old. The old brick farm house on Mount Ephriam Avenue, near the stand pipe, another old Mickle homestead was built in 1733, that date being under the weather boards now covering its east end.



CAMDEN COUNTY COURT HOUSE.

An interesting momento of the past which good taste has preserved where it was first set, is the old hexogonal mile stone on Broadway, at the curb stone in front of St. John's P. E. Church.

On March 13th, 1844, the county of Camden was created. The act of the Legislature doing so provided that for one year the Camden County Court should be held at Woodbury until the voters of Camden county were to decide where their county seat should be. This precipitated a bitter and hotly contested fight between Camden and Berlin, then called Long-a-Coming, which was not settled for seven years. Not until several law suits and three elections were held, did Camden win. The first county courts were held in the small brick town hall on the south side of Federal St., where the office of the Public Service Corporation now is. Small and homely in the lack of any architectural beauty, as a great contrast to the present beautiful Court House as it is possible for any two buildings to be, it answered the purpose for a decade, or until the county built the Court House on Broadway, the corner stone of which was laid on June 26, 1852, and which was torn down in 1904 to make room for the present one whose corner stone was laid on August 18th, 1904, and the beauty and harmony of whose perfect dome and every outline is a continued joy to view.

After forty-three years Camden found itself cribbed within its boundaries, which no longer suffices its ways, and on February 14, 1871, a new charter was granted enlarging its borders so that it covered all the territory between the Delaware and Cooper's Creek (the latter being the Asoroches river of the Indians) and south to the mouth of Newton Creek (the Luinyourening river of the Indians) and thence eastward to its north branch and up that to the Mount Ephraim road, and up it to Ferry avenue and eastward along it and the continuation thereof to Cooper's Creek, very nearly the boundaries of the island the Indians called Aquianasra, and which both the Dutch and Swedes noted and mapped in their surveys of the Delaware.

The inhabitants of the adjoining town of Stockton, wishing the benefits of Camden's citizenship, the Legislature, on March 24th, 1899 passed the act annexing that town to Camden, thus increasing the territory of the city one-third and its population one-sixth. At the time of the last census, the population of the city was 83,363.

Industrially, Camden has shown a wonderful growth in recent years. Notwithstanding the fact that during the period of five years previous to 1905 there was a decrease of 24 in the number of establishments, a large percentage of increase was shown in the capital invested, wage-earners and value of products. The increase of $15,617,319 in value of products was due to the substantial gains in the older industries as well as to the creation of many new ones. The total value of products was $33,587,273, the main industries being phonographs and graphophones, drug grinding, leather, iron and steel shipbuilding, worsted goods, foundry and machine shop products and floor oilcloth and linoleum.

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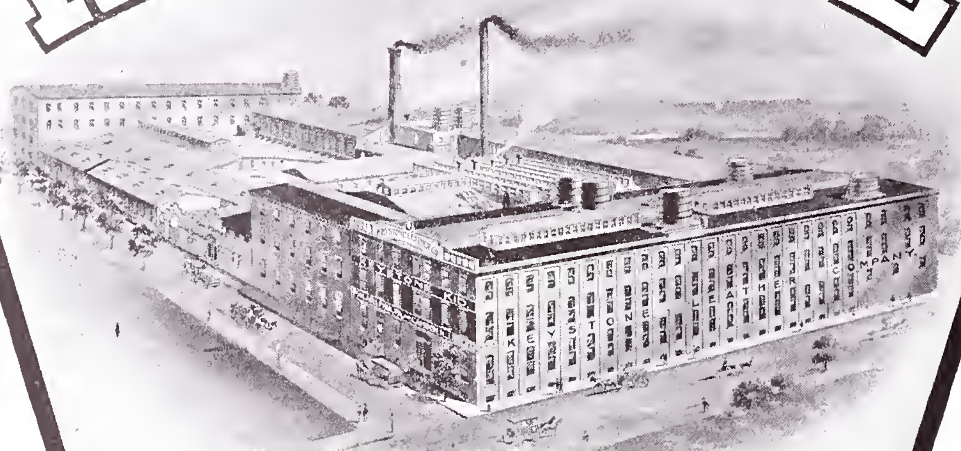

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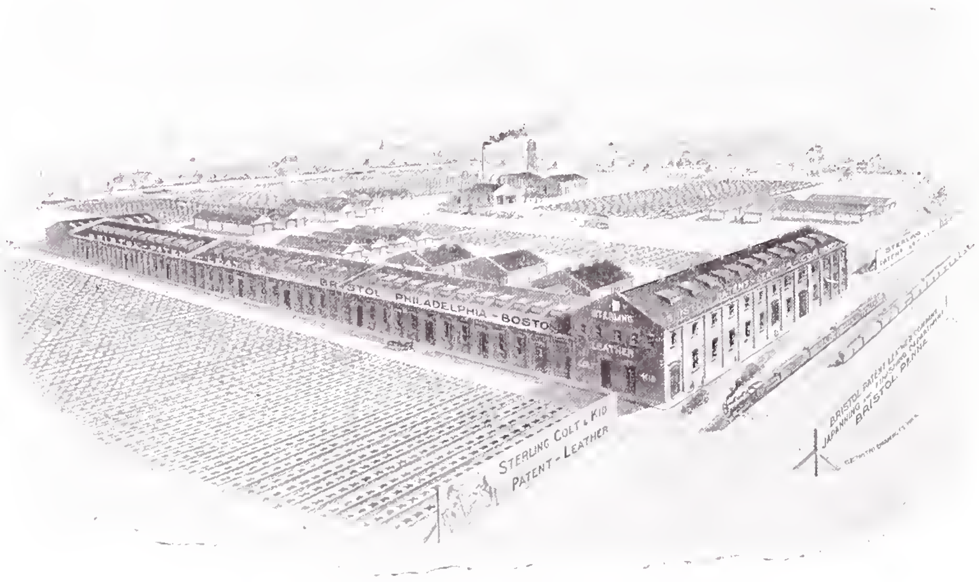
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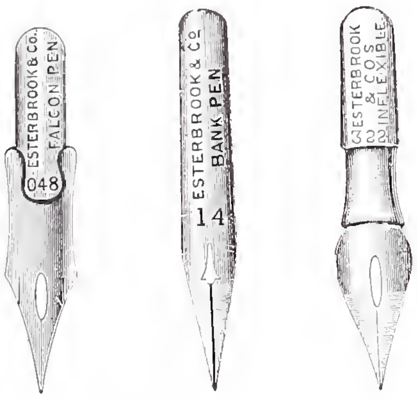
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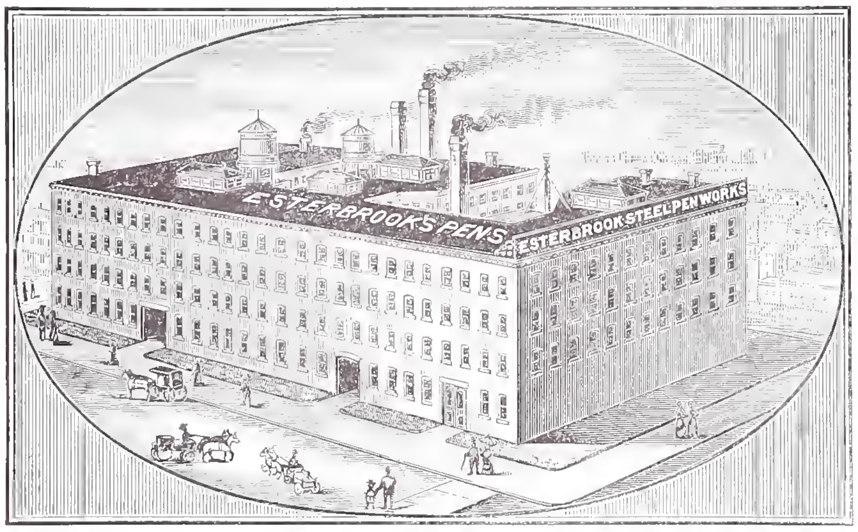

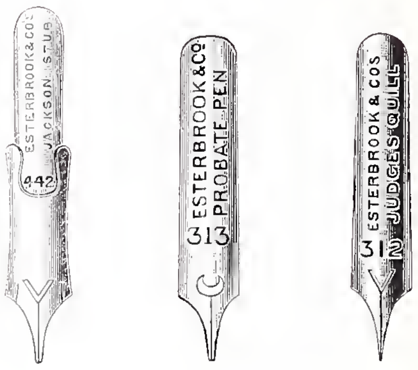
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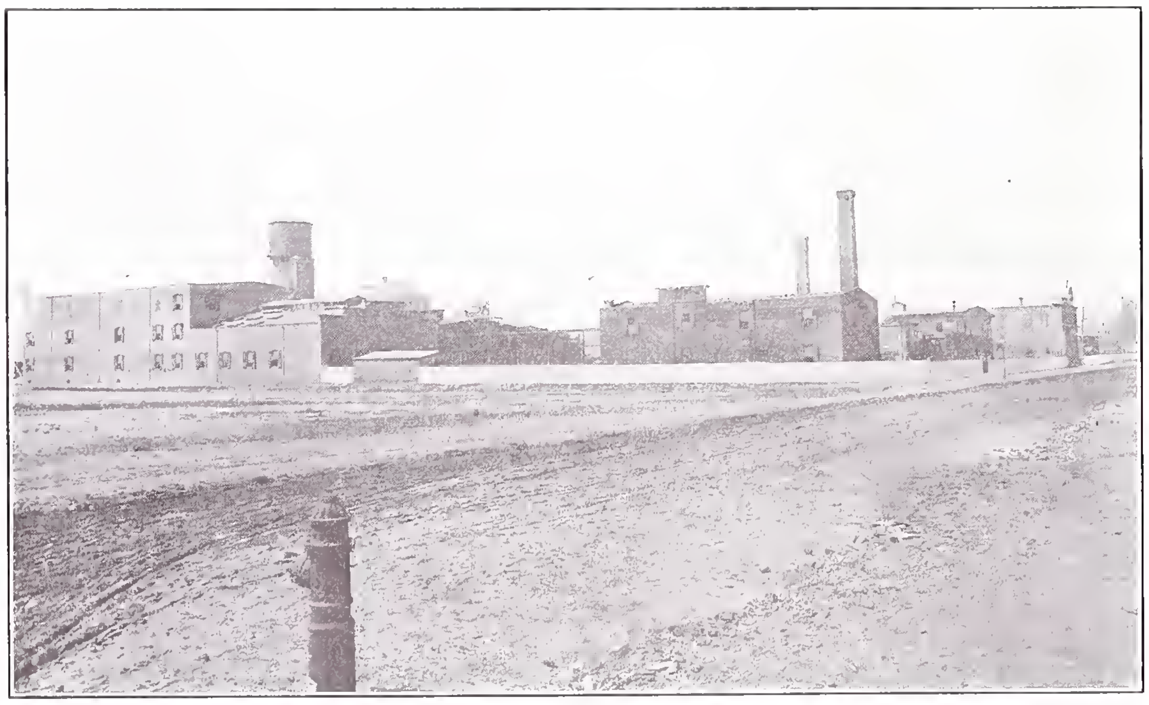

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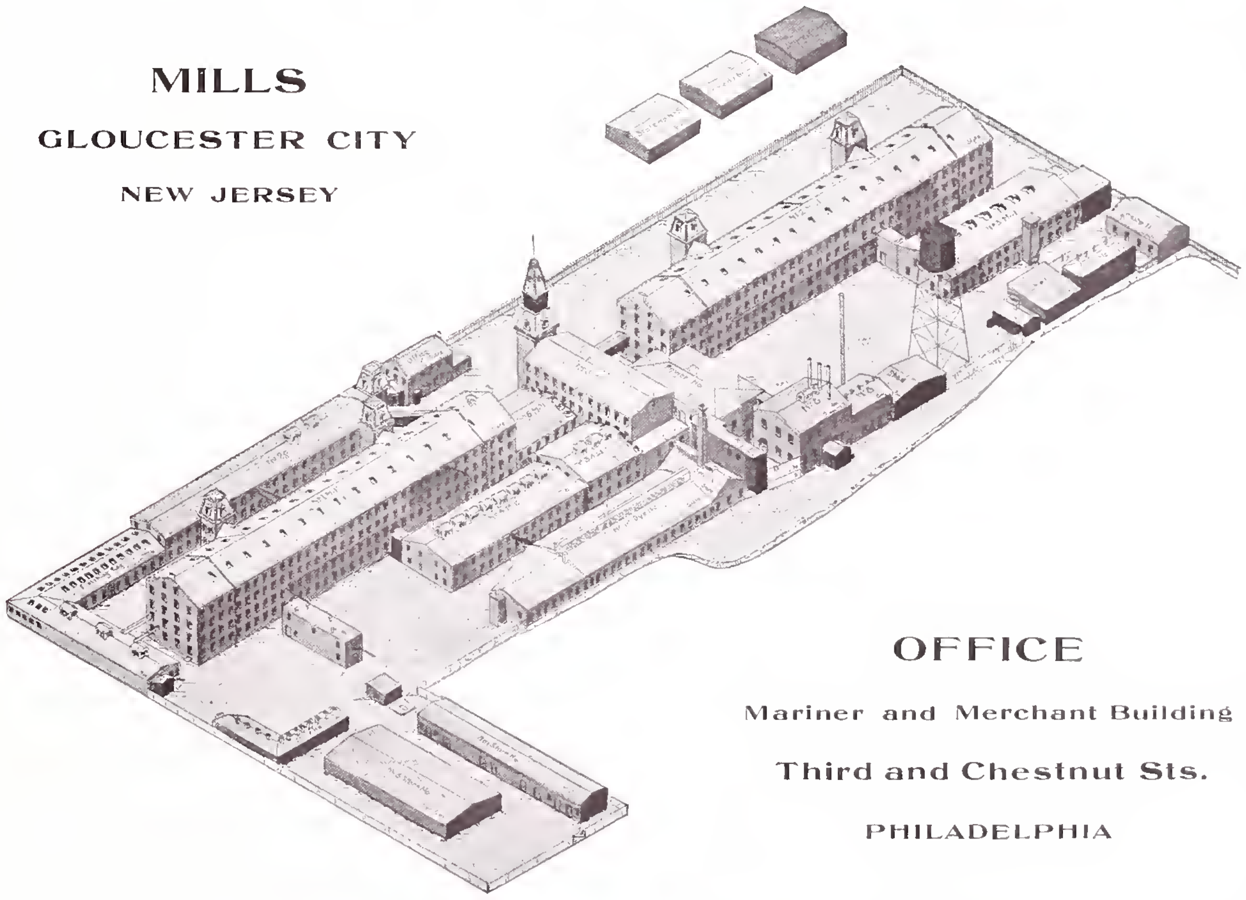

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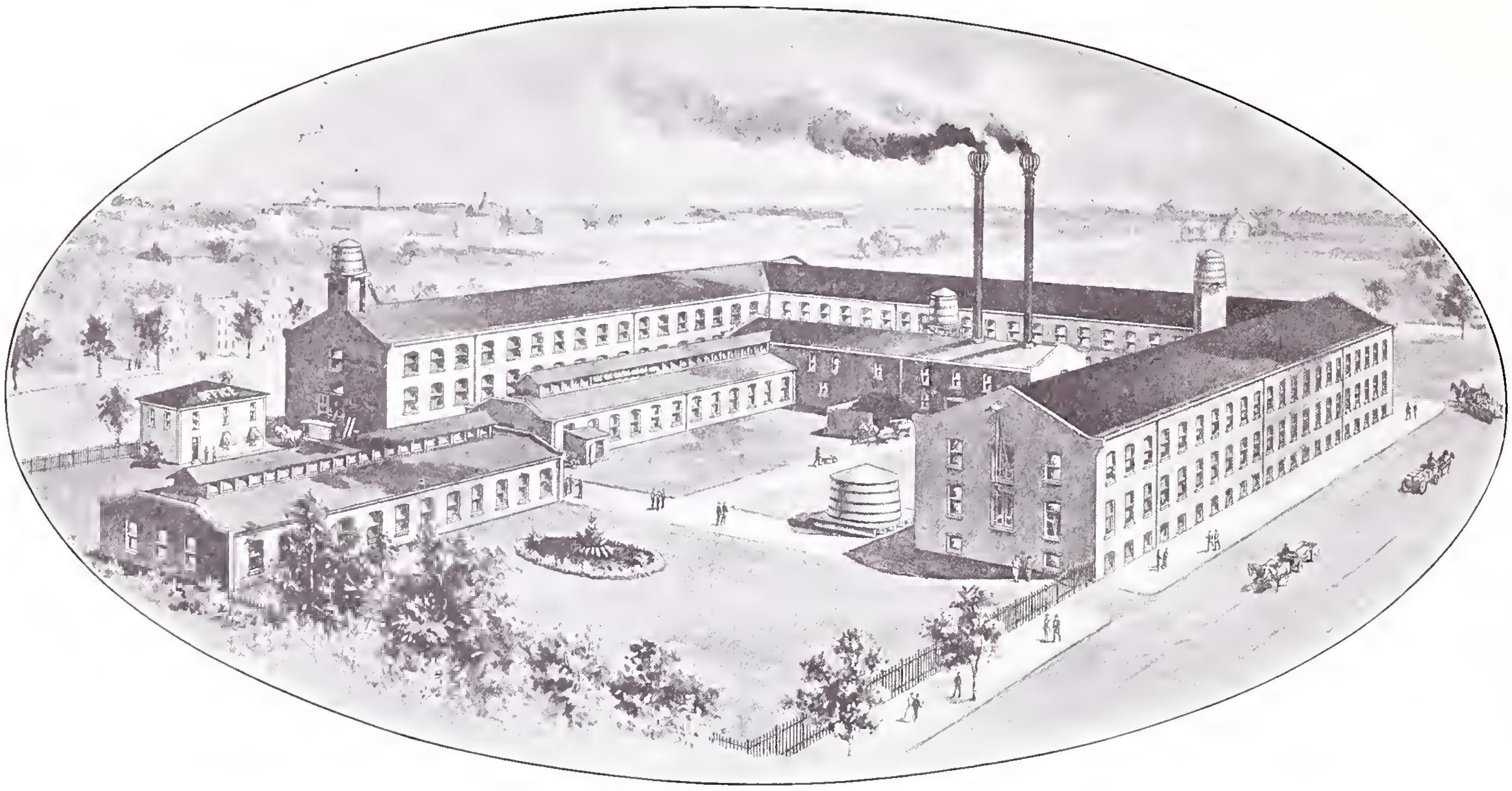

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Trenton of To-Day

Industrial Trenton has shown phenomenal growth in the last few years. There was an increase of 66 in the number of establishments between 1900 and 1905, when the last census was taken. The capital increased $16,998,640, or 69 per cent. the increase for value of products being $4,261,877, or 15 per cent. This city is the headquarters in New Jersey for pottery, terra cotta, and fire clay products, and in 1905 produced more than one-half of the total value of products for the industry in the state. Measured by value of products, however, the steel works and rolling mills holds first rank, but the largest number of wage earners, 4,571, was employed in the manufacture of clay products. Other important industries are the manufacture of rubber belting and hose rubber and elastic goods; foundry and machine shop products; wirework including wire rope and cable; and structural iron work.

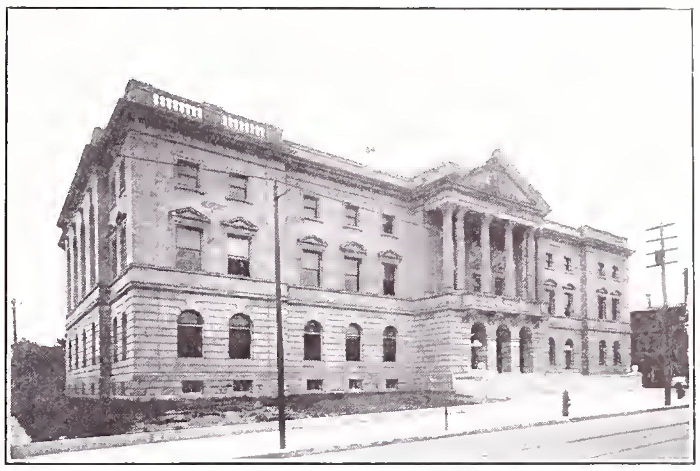
Twenty-four years ago Trenton was a city in name, and a village in reality. Its population including Chambersburg and Millham, was a little more than 37,000, but it lacked those essential features which go to make up a city. A tour of the town disclosed dirt streets in the main, with a very few belgian block and cobble stone pavements. Gas and oil lamps burned on a moonlight schedule. The main streets were lined with wooden sheds in front of the stores in true back country style. A volunteer fire department managed conflagrations. There were no sewers and the police department was small.

But the elements which had produced the Trenton of that time were destined to be the influences in creating the more splendid Trenton of to-day. The first of these was the city's location. At the head of navigation on the Delaware and holding the key to the whole section between New York and Philadelphia; at the threshold of all the coal fields of Pennsylvania, guaranteeing unlimited fuel; in the midst of a splendid farming country—these facts caused the small settlement around Stacy's mill at "Ye falles of ye Delaware" to grow into the more important Trent Town, and finally develop in the modern Trenton. The town which was the half way station for the New York-Philadelphia stage route became the desideratum when the Camden and Amboy Railroad, the Delaware and Raritan Canal and the Belvidere Delaware Railroad, now the Belvidere Division, were built. These routes of commerce aided in making the city of 1882, and formed the basis for the greater city of 1907.

POST OFFICE, TRENTON.

Trenton's population in 1880, according to the United States census, was 29,910. Chambersburg had 5,437 inhabitants, and Millham about 2,000, so the combined population was 37,347. The state census taken last year gave this city 84,180 inhabitants, exclusive of all suburbs. None of the present suburbs are incorporated as municipalities, so their population is not known separately. For the purposes of comparison to show growth, therefore, the 1880 figures for Trenton exclusively should be taken. The increase shown since then is 54,270, or 182 per cent.

In the realm of banking this city's progress has been little short of marvelous. In 1882 the city had four banks—the Trenton Banking Company, the First National, the Mechanics' National and the Trenton Saving Fund Society. Their deposits aggregated $3,683,945.39. Besides those banks, the city now has the Broad Street National, the Trenton Trust and Safe Deposit Company and the Mercer Trust Company. To-day Trentonians have on deposit in the seven banks a total of $19,787,502.90. This is an increase of $16,103,557.51, or more than 400 per cent. Banking loans and discounts form another financial barometer by which to judge a city's commercial progress. In 1882 this item in the local bank reports was in the aggregate $2,641,253.19, while the reports for the close of business August 31 last showed the item had jumped to a total of $11,203,129.56.



MERCER COUNTY COURT HOUSE, TRENTON.

The showing in manufactures is a splendid one also. According to the United States census of 1880, Trenton at that time had invested in manufacturing a total capital of $6,966,830. The figures of the government's census of manufacturing taken in this state last year shows that then the capital invested here had grown to $41,623,232. This is an increase of $34,656,402. In the other items of manufacture the two census reports show the following for this city:

	Employees.	Yearly Wages.	Cost of Raw Materials.	Value of Product.
1905............	15,295	$8,343,371	$17,692,467	$32,719,945
1880............	8,902	3,150,119	7,421,399	12,712,862

EAST STATE STREET, TRENTON.

The city has made great advance in the manufacture of pottery, iron and steel, rubber goods and the hundred and one lesser lines. To-day porcelain products "made in Trenton" are in use all over the world; Trenton wire stretches from ocean to ocean, and carries messages and propels trolley cars in a score of foreign lands; Trenton made rubber hose and other rubber products are shipped everywhere; bridges and other structural iron and steel made here made be found from Africa to Japan, and from Russia to Argentine Republic.

In its territorial expansion and the development of the acquired lands Trenton has shown wonderful growth. In 1882 all that section of the city east of the Delaware and Raritan Canal and south of the Assanpink creek formed the separate borough of Chambersburg. All the territory east of Hart avenue, and north of the Assanpink creek was Millham township. Chambersburg had become a thriving place of many homes, with a population of 5,437. Millham heard every day the whirr of wheels in a score of factories, and its population was about 2,000. The section now included in the Twelfth ward was open fields with but a mere handful of houses. Chambers street, South Olden avenue, East State street, Greenwood and Hamilton avenues, where they traversed this section, were country roads. Prospect street marked practically the western limit of the city. The New Jersey State Hospital, now within the city limits, seemed a long distance in the country.

In 1882 the floating debt of the city was $172,201.16. In 1881 $170,000 of this amount had been founded by a bond issue upon authroity of the Legislature. Then the bonded debt of the city stood at $611,762.29, including the $170,000 issue just referred to. To the credit of this there was in the sinking fund $87,023.47, leaving the net bonded debt $523,842.82.

City Treasurer Stoke's report for this year gives the total present bonded debt at $4,519,040.04. The amount to its credit in the sinking fund is $1,511,434.74, leaving the net bonded indebtedness $3,007,605.30.

Cook's Decora

THE ORIGINAL WASHABLE WALL CLOTH

Sanitary as marble or tile and much cheaper than either in the end. Microbes and grease cannot adhere to this material. It can be cleaned instantly by simply wiping with a damp cloth, which leaves it as good as new. Special patterns, not only adapted to every room in the house, but for covering the walls of public buildings as well.

Cook's Decora holds its surface; will not crack or peel; can be applied to the wall the same as paper. It is acknowledged Hygienic, Artistic, Waterproof, Everlasting.

Send for samples of "Cook's Decora" Wainscoting and Special Tile Effects.

Cook's Linoleum

PLAIN, PRINTED AND INLAID

Moulded in one entire piece, two yards wide and thirty yards long, the absence of joints giving this material greater strength and better wearing qualities. Patterns of exceptional attractiveness in both Printed and Inlaid, and highest quality guaranteed. Being more pliable than any other make, it is the most handleable Linoleum on the market.

Trenton Oil Cloth and Linoleum Co.

TRENTON, NEW JERSEY

THE WORKS OF THE

Hamilton Rubber Manufacturing Co.

TRENTON, N. J.

Is the source from which flow **HAMILTON MADE GOODS** to the mar [illegible]

We Manufacture a Complete Line of Mechanical Rubber Goods

Conveyor Belting, Main Drive Belting, Machine Belting for every class of service. Steam Hose, Suction Hose, Fire Hose, Rubber and Cotton rubber lined Garden Hose, PERFECTION PINK SHEET PACKING, the best ever produced for steam joints. "PERMANENT" Black Sheet.

PRICES AND SAMPLES FURNISHED PROBLEMS SOLVED

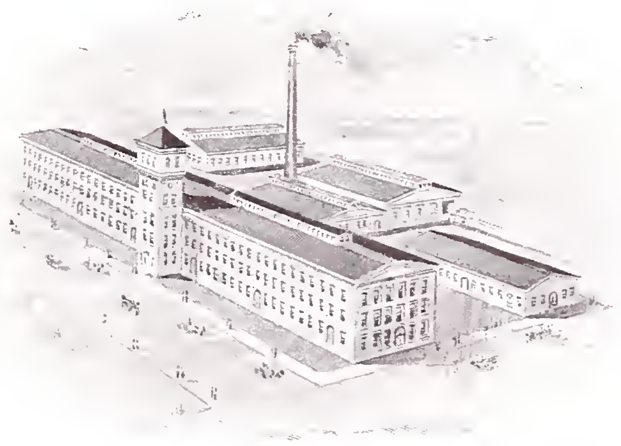
NEW YORK
Railroad Dept., Mr. A. F. Conklin, 253 Broadway.
Export, Mr. J. A. Dennis, 149 Church Street.
Domestic, Mr. F. W. Thurman, 24 Park Place.

PHILADELPHIA – Mr. S. McMaster, 3rd and Chestnut Sts.
CHICAGO—Mr. E. E. Bast, 161 Lake Street.

The Acme Rubber Mfg. Co.

OF TRENTON, NEW JERSEY

FACTORY strictly modern in design, with machinery of the latest and most approved description throughout, using only first class raw material, and producing nothing but reliable grades



WE SOLICIT inquiries from the trade direct, or through our Branch Stores or Salesmen. We promise prompt attention to same.

MANUFACTURERS OF

Rubber Carriage Drill and Duck, Cotton Rubber Lined Hose, and Mechanical Rubber Goods of Every Description

Factory, TRENTON, N. J., on main line Pennsylvania R. R.

BRANCH STORES:

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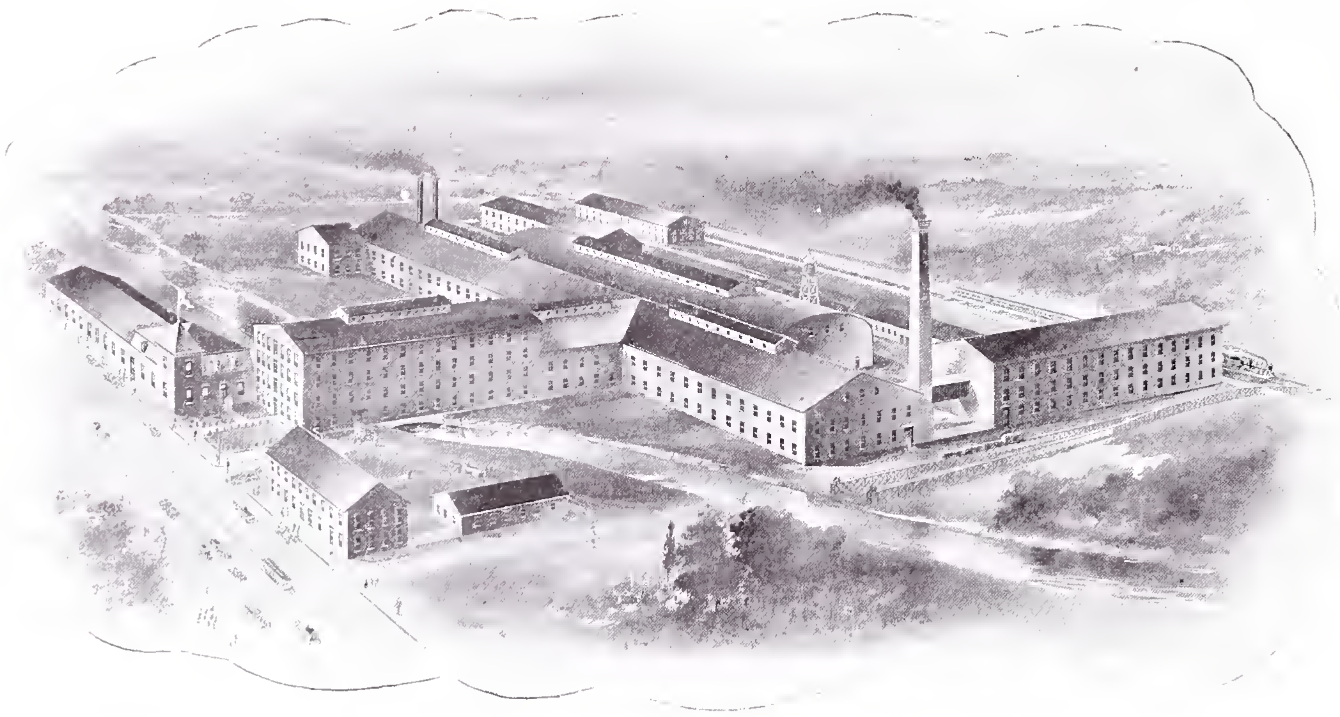
NEW YORK—55 Warren Street
BOSTON—276 Devonshire Street

The Empire Rubber Mfg. Co.



FACTORY: TRENTON, N. J.

MANUFACTURERS OF

Mechanical Rubber Goods of Every Description; Rubber and Cotton Hose, Rubber Belting, Packing;

Solid Rubber Vehicle Tires, Mats, Matting, Valves, etc.

RUBBER CARRIAGE DRILL and DUCK. ENAMEL CARRIAGE DRILL and DUCK.

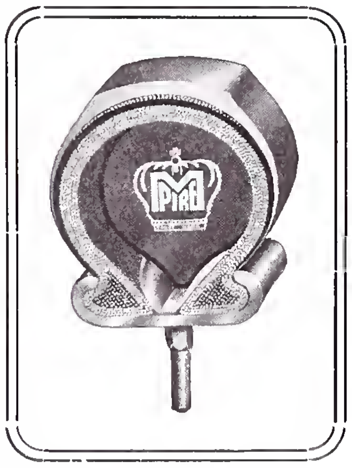
BRANCHES: CHICAGO, 20 La Salle St. NEW YORK, 148 Chambers St. BOSTON, 292 Devonshire St.

The Empire Clincher Tire

IS A SPLENDID TIRE. WE DON'T THINK THERE IS A BETTER TIRE.
IT IS A TIRE THAT WILL GIVE YOU SERVICE AND SAVE YOU TROUBLE.

Cured In Open Steam,

Making it pliable and easy riding.



Made With Raised Thread,

Giving it the greatest wearing surface.

Write for Our Prices on Tires and Sundries

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TRENTON, NEW JERSEY

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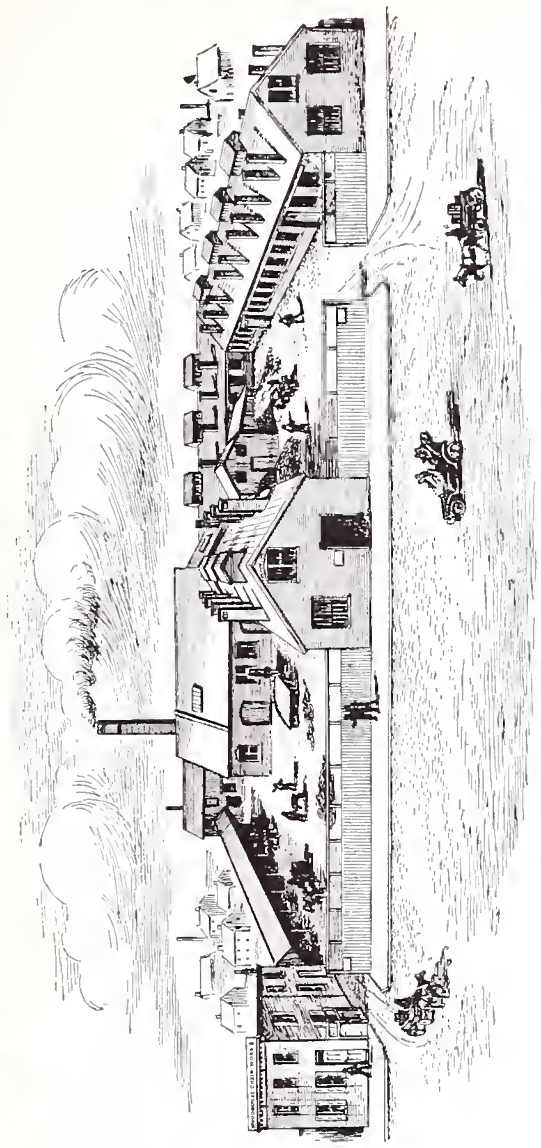
1885 1907



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German Pattern Machine Chains a Specialty
2/0 and 3/0 always in stock)

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CRESCENT INSULATED WIRE & CABLE CO. TRENTON, N.J.

National Code Standard

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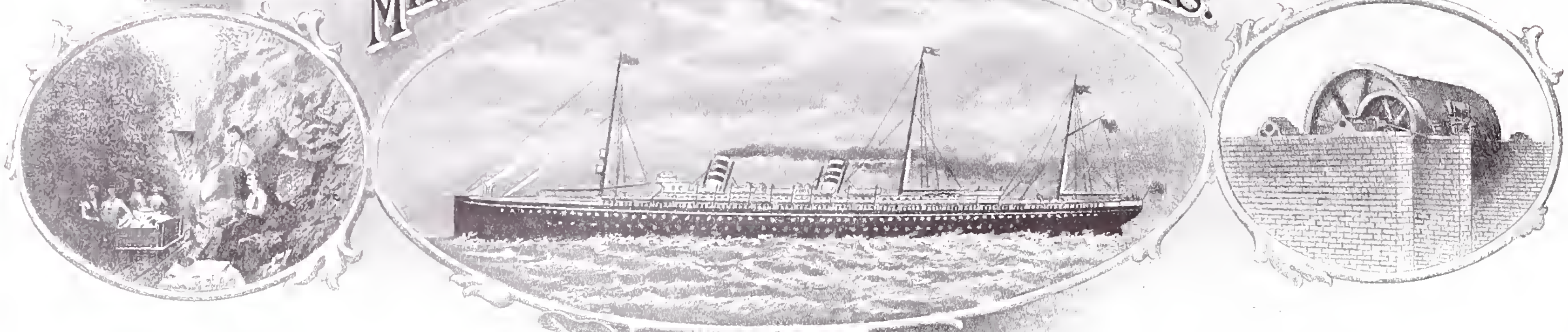
MINERS, IMPORTERS AND PULVERIZERS.



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Trenton, New Jersey, U. S. A.
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Pottery, Rubber and Pulverizing Machinery.

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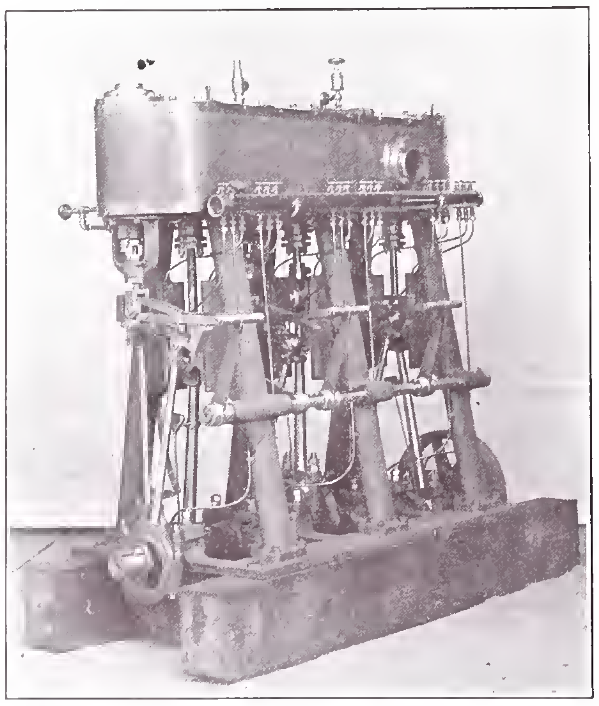

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Trenton Rotary Brick Machine,

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Light and Heavy Castings and Special Machinery of all kinds.

One of a pair of Triple Expansion Engines installed in the U. S. R. boat "Carolina", of Georgetown, S. C.

The New Jersey School-Church Furniture Co., Trenton, N. J.,

MANUFACTURERS OF THE

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THE EDUCATIONAL LEAF CABINET

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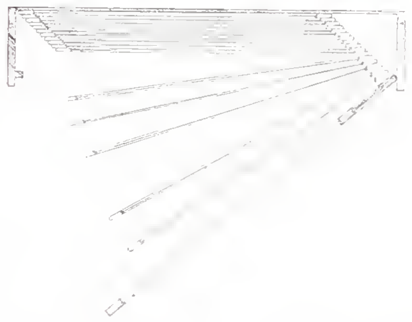

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The best device known for the display of Educational and other kinds of flat exhibits. Contains 15 swinging frames, which, with front and back, give 33 surfaces each 22 x 28 inches, equaling over 140 square feet. Takes up less than 6 cubic feet of space. Has been used at all the Expositions of recent years.

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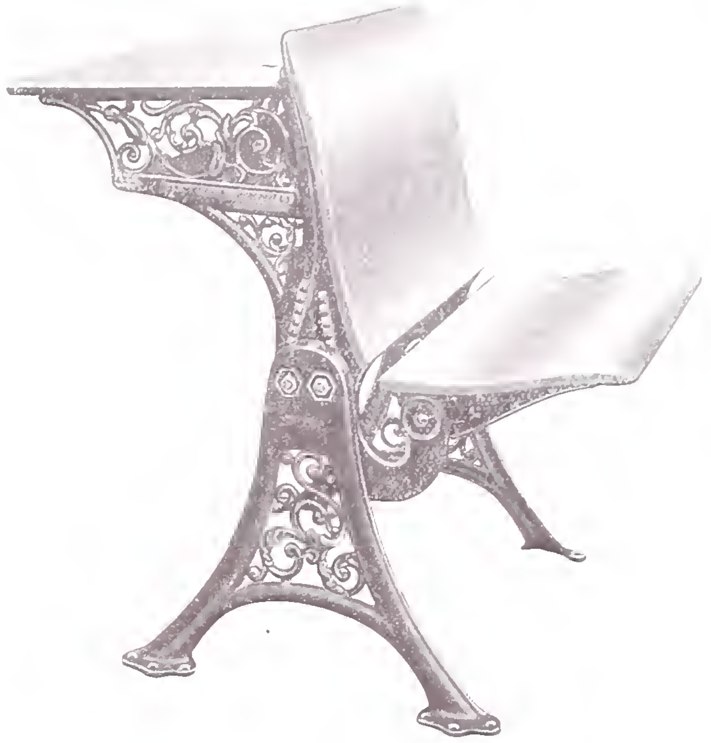

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Our desks are not sold on the merit of low prices alone, but more chiefly on the merit of unquestioned quality. They are in use in the principal cities of this country where quality is demanded, and also in many foreign countries.

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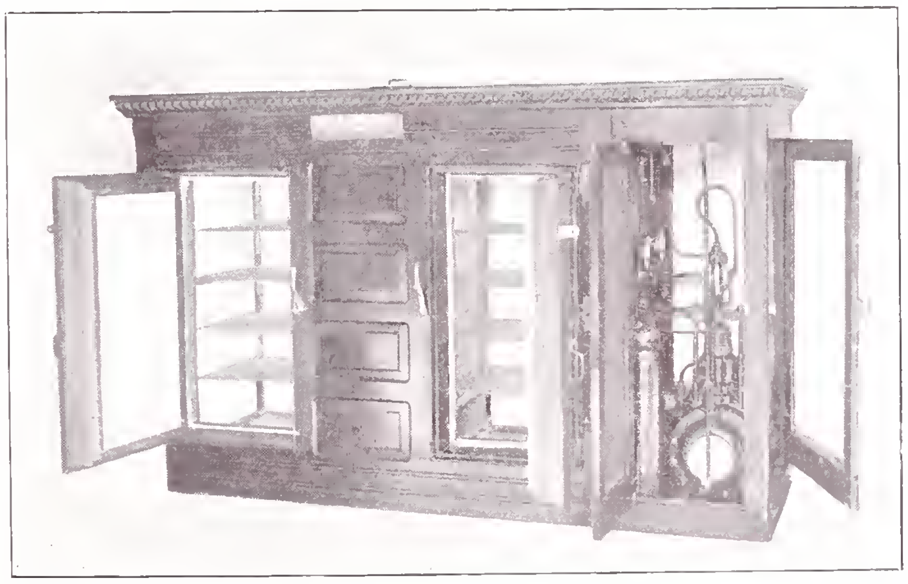
For both Ice and Mechanical Refrigeration



THE above cut shows a Hill Refrigerator with a 500 lb. Refrigerating Machine attached. We build Refrigerators for Hotels, Restaurants, Institutions, Butchers, Grocers, Private Families, etc. Designers and builders of the most handsome and up-to-date Store and Market Fixtures of all kinds. Small Cold-Storage Plants a Specialty (from one to ten tons capacity) installed in all parts of the country. Sectional Meat Blocks a Specialty. Write for Catalogue.

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Belle Mead Sweets

BON BONS CHOCOLATES

Made for People of Refined and Educated Tastes. For People who have the Means and Disposition to Gratify those Tastes

SOLD IN SEALED PACKAGES ONLY BY THE
ONE EXCLUSIVE DRUGGIST IN EACH CITY

Established 1848

Ask Your Grocer for the Cracker
STAMPED

"STAPLER"

Always fresh, always good, and above all, clean
and free from all impurities.

FOR SALE BY ALL GROCERS
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CEMENT ART TILE

In Various Colors and Designs for Interior

Art Tile for Vestibules, Side Walls, Flooring, Bathrooms, Wainscoting and Cement Porches

Also **Pavement Blocks** in various sizes, shapes and thickness, made under 4200 bbls. pressure to square inch, a guarantee as to stability and superiority over all others

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We claim we are the only Manufacturers of Cement Tile made in various colors in this country

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THAT LASTS LONGEST

ASK YOUR DEALER FOR IT

Easily and cleanly applied. Gives a quick, brilliant lustre. Guaranteed to go twice as far as paste or liquid polish.

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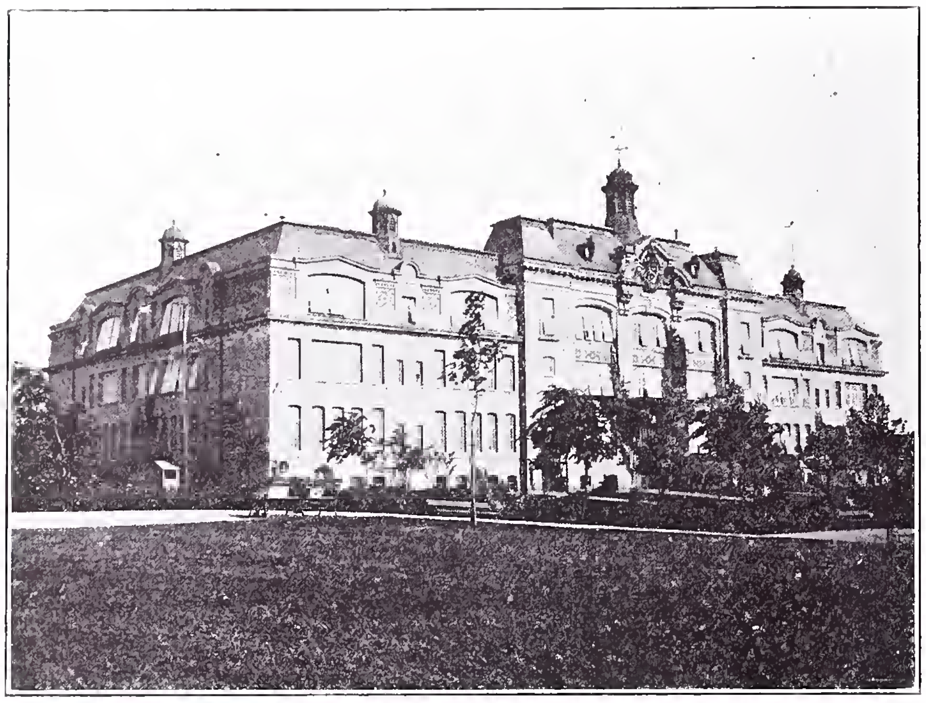
Progressive Newark

In population, value and variety of manufactured products Newark is the first city in New Jersey. Every convenience and advantage required for home, social or business purposes are to be found here equal to the best offered by the largest cities of the country. Fine department stores and office buildings, a low tax rate, unlimited supply of pure, soft water, adequate banking facilities, perfect means of communication by post, telegraph or telephone, ample express facilities and low transportation rates by either rail or water, unsurpassable steam railroad facilities for passenger and freight traffic to any part of the American continent; a perfect trolley service extending to every section of the city and its suburbs; thirty minutes ride to New York; a practically limitless supply of labor, skilled and unskilled, and large manufacturing establishments representative of every industry known to civilization. The success of the great number of industries now and for many years established in Newark represents the judgment and vindicates the wisdom of the practical business men who own and manage them, and is, perhaps, the best argument in favor of Newark as a location for manufacturing industry.



HIGH SCHOOL, NEWARK.

There are many buildings in the business section, some of brick, others of frame construction, that are available for manufacturing purposes. A choice of these, with steam or electric power, can be secured by purchase or lease, and floor space—great or small—can be secured according to requirements. Land for factory purposes may be had in nearly all sections of the city. Sites can be secured with direct steam railroad connections, and a few can still be found on the water front with the railroad connections, also.

Newark is located on the following-named railroad lines, all of which have one or more stations in the city: Pennsylvania, Central of New Jersey, Delaware, Lackawanna and Western, Erie, Lehigh Valley, Newark and New York, and New York and Greenwood Lake. The stations of all roads are on or at a very short distance from the main thoroughfares, that at Market street being the largest and most important in the city. The population of Newark is 283,300.

Newark is a banking town with national banks, savings banks and trust companies, having banking powers aggregating sixteen in number; Western Union and Postal telegraph companies; and many telephone stations conveniently distributed through the business and residential sections of the city. The distance from New York City, by rail, is eight miles; by water, via the Passaic River, a navigable stream which affords deep-water connection with Newark Bay, Staten Island Sound, New York Bay, Hudson and East Rivers, fifteen miles. The river and bay frontage of the city is eleven miles in extent. Express service is performed by the Adams, United States, National, Wells Fargo and a large number of local New York City, Newark and suburban companies, using the established rail and water routes to and from New York.

Newark's water supply is drawn from the Pequannock Valley, distant twenty-six miles from the city. The cost of the water plant, which is owned by the municipality, was $11,000,000. Total storage capacity of all reservoirs, 9,690,000,000 gallons; average yield of watershed in the driest season, 50,000,000 gallons daily; average daily consumption of water, 30,500,000 gallons.

The city has an almost perfect sewer system, which affords adequate drainage and outlets for all parts of its territory. Electric and gas lighting facilities are practically unlimited, and an inexhaustible supply of electric power, applicable to the heaviest and lightest work, can be had anywhere within the city limits.

There are two hundred and fifty-eight miles of streets in the city, of which one hundred and fifty-eight (158) are paved, and one hundred (100) are improved to the extent of being curbed and graded. The sewerage system consists of sixty-nine (69) miles of brick, and one hundred and forty-three (143) miles of pipe sewers, with outlets suited to the sectional requirements.

The trolley roads of Newark afford probably the best facilities for intercommunity and suburban travel to be found anywhere in the country. All sections of the city are reached, and a uniform fare of five cents, with transfer privileges, entitles patrons to ride anywhere covered by these lines within the municipal limits.

The park lands within the city comprise five hundred and ninety-seven (597) acres, divided into nineteen (19) city and four county public pleasure reservations. Much of this land is already beautifully developed, and work on the improvement and embellishment of the remainder is constantly going on.

Newark is particularly well endowed with institutions of learning; there are fifty-seven (57) public schools, including normal, training and high schools, grammar and primary schools; there is also a school of technology, and one in which drawing is taught, all under public control. The public school property of Newark is valued at $3,204,000.

Supplementary to the public educational system in some cases, and in others filling a field of their own, are twenty-four private schools, some pursuing the ordinary educational course under parochial or denominational auspices, and others devoted to teaching the methods and forms of business, but all of high grade in their respective lines. The Public Library, one of the finest buildings of its kind in the State, contains at the present time 103,784 volumes of choice literature and works on scientific, technical and professional subjects. The library building was erected and furnished by the city at a cost of $415,000. That this fine institution has met and provided for a real public want is shown by the fact that its annual circulation reaches the enormous total of almost 500,000 volumes.

Newark is well provided for in the matter of fire protection. It has a paid department equipped with sixteen (16) engines, seven (7) hose wagons, six (6) hook and ladder trucks, fourteen (14) chemical engines and hose carriages and one (1) water tower.

FRELINGHUYSEN MONUMENT, NEWARK.

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IN ITS HOME STATE, NEW JERSEY,

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has over 985,000 policies in force. It has paid over $28,000,000 in New Jersey to residents of the State, including more than $1,000,000 in voluntary concessions. Over $7,000,000 is the amount loaned on bond and mortgage and between two and three thousand New Jersey residents are in the service of The Prudential. During its existence the Company has paid over $3,391,000 to the State in Taxes.

The Prudential leads all Life Insurance Companies in New Jersey in the number of policies in force and amount of insurance in force, as well as claim payments and total annual income.

The Prudential issues desirable forms of policies upon the most liberal terms. You need life insurance, your family needs *protection*.

Write for information of policies at your age.

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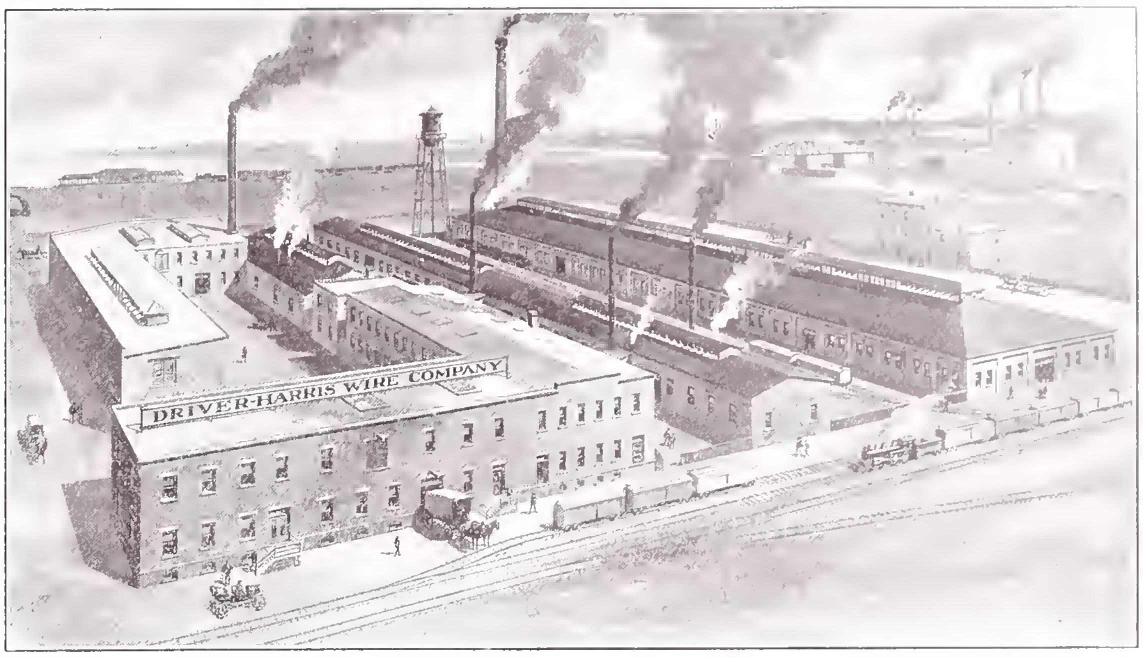

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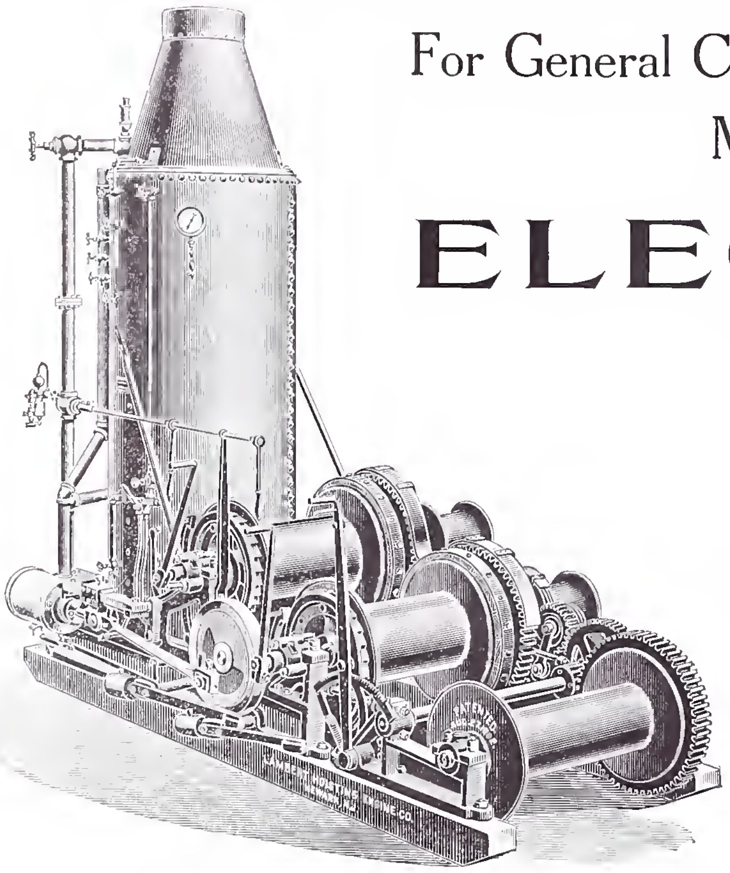

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OF IMPROVED DESIGN FOR VARIOUS CONDITIONS.

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Of an Up-to-Date Type.

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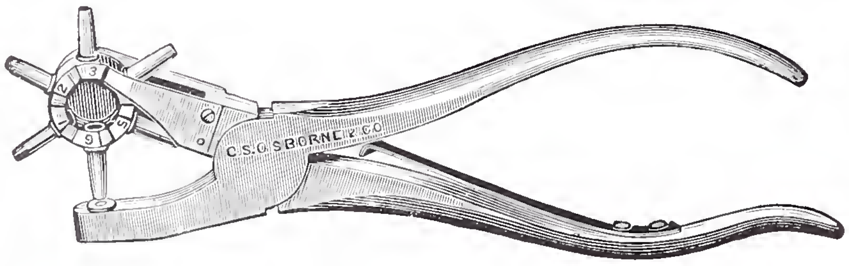
Mutual Life Building, Seattle, Wash. 109 Lacock Street, Allegheny, Pa. 520 Old Colony Building, Chicago.
1710 Market Street, Philadelphia. 715 N. Second Street, St. Louis.

Established 1826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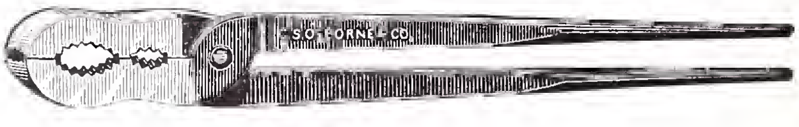
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Factory: Newark, New Jersey

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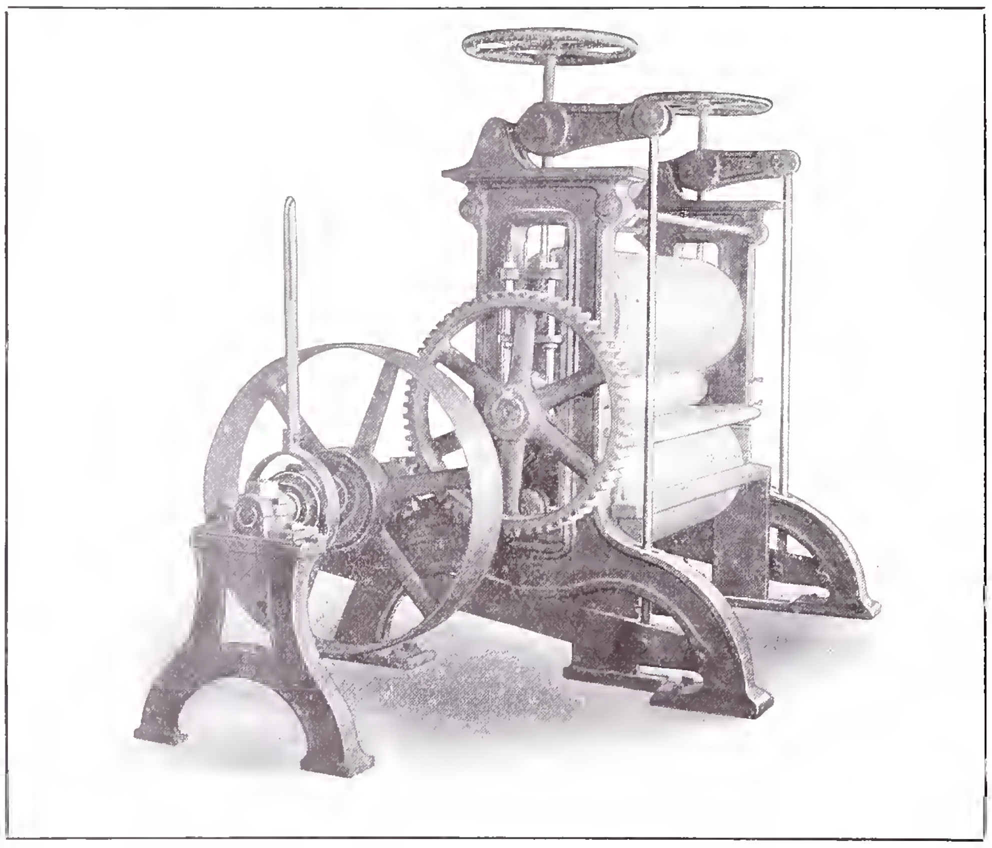

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Oil Cloth Machinery
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Paper Mill Machinery
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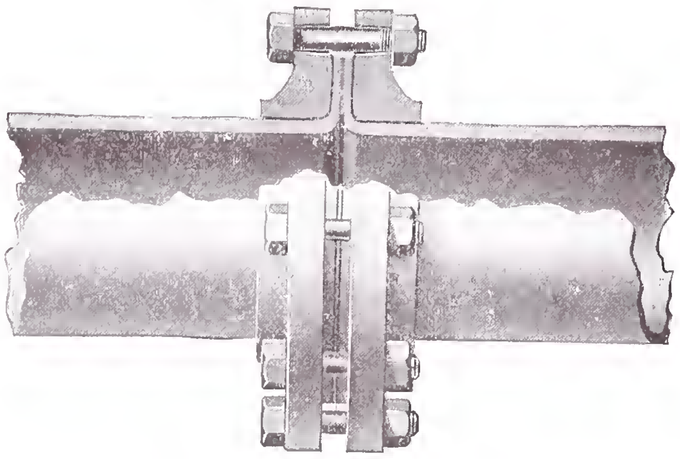

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High Pressure Steam Work a Specialty

Also Manufacturers and Jobbers of

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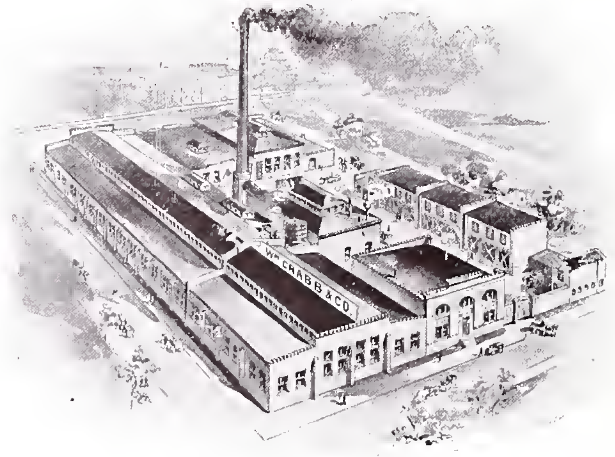

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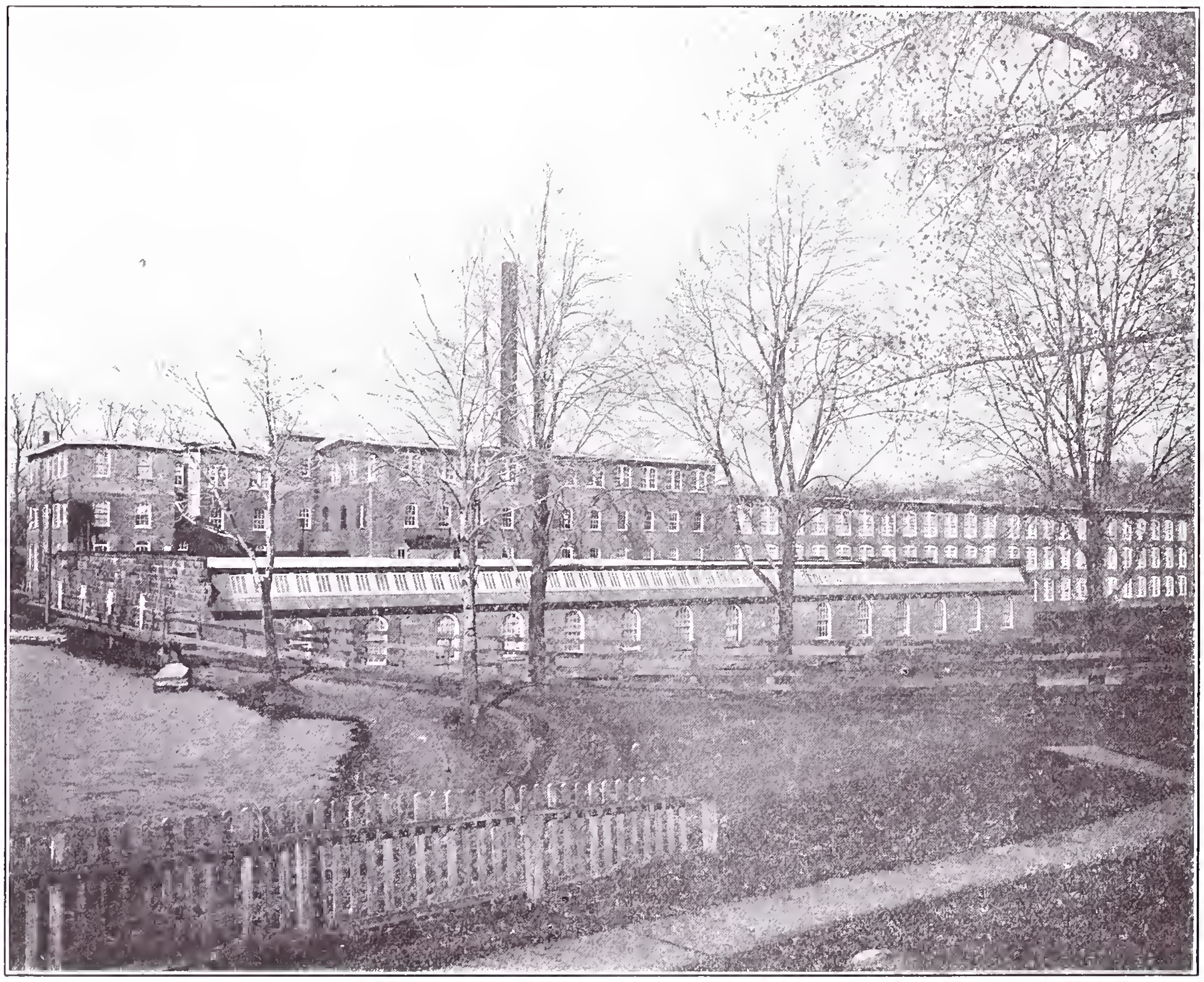
BLOOMFIELD, N. J.



MANUFACTURERS OF

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Overcoatings, Kerseys, Indigo Blue Police
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CARY, DEUSCHER & DENNIS, Selling Agents, The Hartford Building,
41 Union Square, Cor. 17th Street, NEW YORK

Industrial Jersey City

Jersey City is the terminal of most of the great trunk lines of railroad running to New York City from all parts of the continent. The roads entering Jersey City and connecting with New York by ferries are as follows: Pennsylvania, Central of New Jersey, Lehigh Valley, Erie, New York, Susquehanna and Western, West Shore (controlled by New York Central), New Jersey Southern, New York and New Jersey, New York and Long Branch, New York and Greenwood Lake, Northern of New Jersey and Baltimore and Ohio. All these roads have their terminals on the Hudson River water front of the city, and in the centre of its most active business section.

In the matter of population and annual value of manufactured products, Jersey City is surpassed only by that of Newark. It is, therefore, the second most important community in the State. The important special advantages that has brought about the wonderful commercial and industrial developments of Jersey City is the fact that it is separated from New York only by a river which is traversed by many large and powerful steam ferry-boats during the entire day and night. But the growth of the past, due to this connection, is relatively insignificant compared to that which will follow the practical unification of the two cities by means of the several railroad tunnels under the river, now in course of construction and to be finished and in operation within a few years.

Other important advantages conductive to the city's growth are: Railroad communication with all parts of the continent, affording a choice of competing routes in the shipment and delivery of goods to and from all points; its position on the Hudson River and New York Bay, which places the city in touch with every seaport in the world. Internally there are many important advantages that have influence in bringing about a much wider expansion in the future. These are, in part: Low rents, reasonable tax rates, well paved streets, and an abundant supply of water and a sewer system which effectually drains all its sections, and an abundant supply of labor skilled in all the various lines of modern industry.

Jersey City is as richly endowed with schools as any community in the country. The public school buildings are forty-four (44) in number, including one large high school. The aggregate seating capacity is 26,834. The total value of school property within the limits of the city is, as reported by the local Board of Trade, $2,300,000. In addition to these publicly maintained educational institutions, there are twenty-two (22) private and parochial schools in Jersey City.

PENNA R. R. FERRIES, JERSEY CITY.

Of churches, there is an equally rich supply. The number of buildings, large handsome structures for the most part, devoted to religious purposes, is one hundred and twenty-two (122). The various denomination represented in this large aggregate include all known forms of Christian worship, besides the Jewish synagogues. A sect not generally known to the public called "Christadelphians" also have a place of worship here.

Jersey City has a total of two hundred and two (202) miles of streets and avenues, of which one hundred and thirteen (113) are paved with either asphalt, belgian block, macadam or brick. A little more than twenty-three (23) miles are partially improved, and sixty-five (65) miles are unimproved.

The city has eight public parks with a total area of twenty-nine (29) acres and the county park, laid out by the Hudson County Park Commission on the western slope of Bergen and the main part of which is well within the populous part of Jersey City, has an area of more than two hundred acres.

The free public library, representing an investment of $36,000, contains 91,2[illegible] volumes, including the law and medical departments. The annual circulation for home reading is reported at 472,400 volumes. The library has fifteen delivery stations placed in convenient parts of the city, and fifty-eight per cent. of the circulation is through these agencies.

Jersey City has one of the best and most comprehensive systems of trolley service to be found anywhere in the State. The many lines reach all parts of the city and connect with all municipalities of the county, and with Newark, Elizabeth, New Brunswick, Trenton and Philadelphia.

Fire protection is provided by a thoroughly organized and disciplined department, the principal part of the equipment of which is thirteen double steam engines, six hook and ladder trucks and ten hose-carriages.

The water-works, which cost nearly $8,000,000, is calculated for a daily supply of 50,000,000 gallons, but capable of enlargement to 70,000,000.

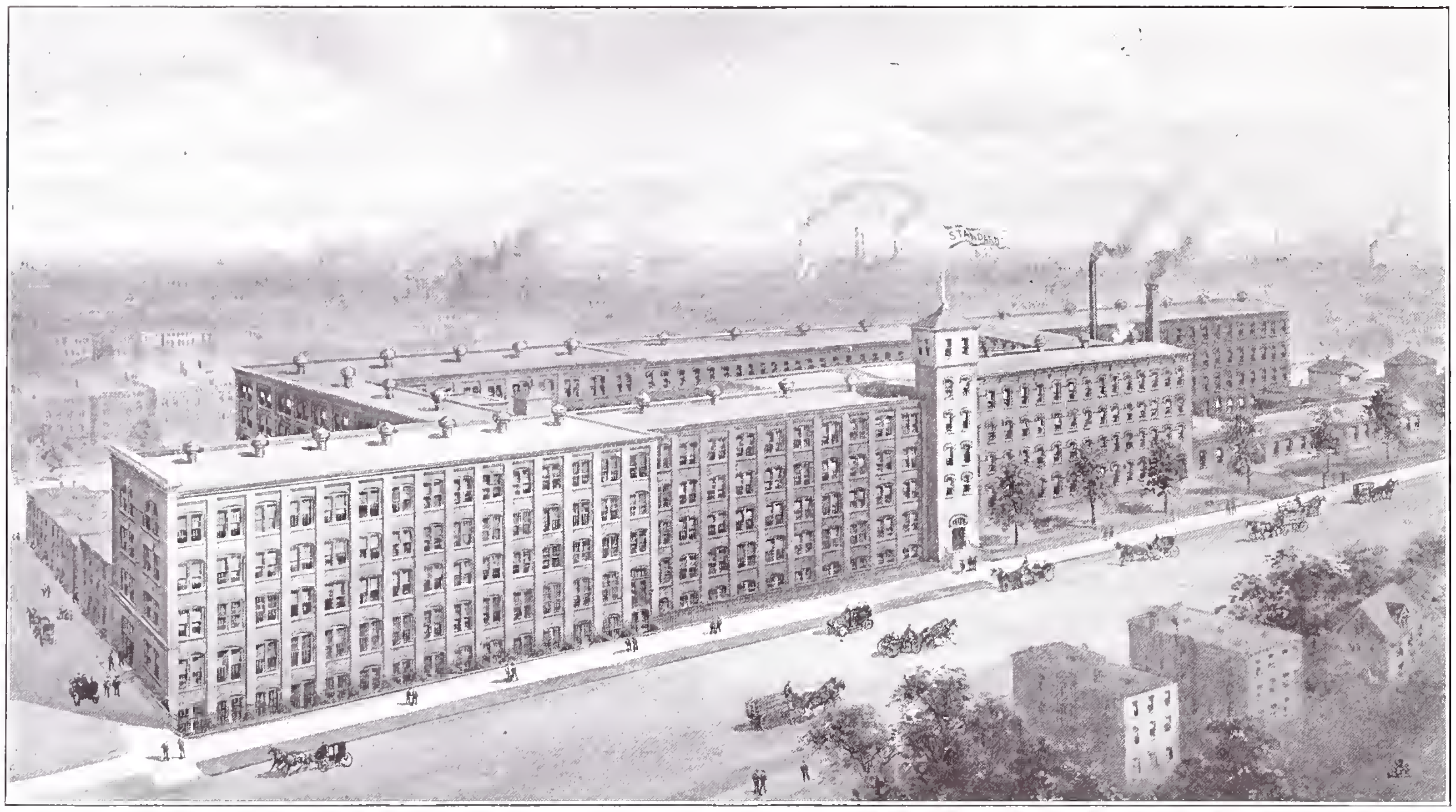
The water-shed at the disposal of the city is capable of producing 120,000,000 gallons daily.

Of the large manufacturing districts of the State, Jersey City ranks second in capital invested, total cost of material used in manufactures and total value of products; in the average number of manufacturing establishments, average number of wage-earners and total amount paid in wages it ranks third.

This is accounted for because the city is exceptionally located as to facilities for railroad and water transportation. According to the last census there were in Jersey City 628 manufacturing establishments, representing capital invested to the amount of $82,394,841. These establishments gave employment to 20,353 Jersey Cityites as wage earners and 2,379 salaried officials. The total amount of materials used by these plants reached the sum of $48,798,807, which materials were converted into manufactured products to the value of $75,740,934. The leading industries are the refining of sugar and molasses, slaughtering, soap manufacture, foundry and machine shop products, cars and general shop construction and repairs by steam railroad companies.

The small rate of increase for the city as a whole is due largely to the decrease in the value of products of the sugar and molasses refining industry.

There are eleven papers published in Jersey City, 5 weeklies, 2 dailies, 1 semi-monthly, 1 Polish weekly and 1 Italian weekly, and the banking facilities are furnished by nine trust companies and seven banks.



New York Standard Watch Company

One of the leading manufacturing industries of Jersey City is the New York Standard Watch Company, whose factory is shown above, where over 750 people are employed turning out over two thousand five hundred watches every working day in the year, and with the extensive additions they are making to their factory they expect to make over a million watches during the next year.

The exceptional popularity of their watches is witness that they are in design, workmanship and time-keeping qualities the best that skill can produce; and furthermore, with the exceptional facilities they have for manufacturing them by having their factory equipped with ingenious automatic machinery, one can readily understand the reasons for the low prices at which the products of their factory are sold.

The writer wishes he had space to describe the processes of making one of these watches; to lead you through the long, bright, clean rooms filled with intelligent workers; to have you stand in wonder before machines which are almost human in seeming intelligence and which turn out automatically hundreds of thousands of necessary pieces for watches mechanically perfect; to show you how the factory is provided with every convenience for the comfort, safety and health of employes—its own heating and lighting plant, its own water supply from artesian wells, etc.; to show you the system and methods which prevail to keep this vast industry in operation so that best results may be obtained; to show you this plant in its entirety so that you would appreciate what a splendid illustration this is of American pluck and skill and enterprise.

They make watches in different sizes and grades suitable for men, women, boys and girls, and there is no modern John Smith or Pocahontas who should be without a good reliable watch when a New York Standard Watch may be obtained from his or her nearest jeweler at a price that comes within the reach of all.

While but a comparatively new company, being established in 1887—20 years ago—they now have agencies and branch offices in all the principal cities of the United States and also in many foreign countries, and the enormous sales and constantly increasing demand for their watches prove beyond any question their claim that they are

"The Best Watch in the World for the Money"

WRITE THEM FOR BOOKLET ILLUSTRATING AND DESCRIBING THEIR WATCHES

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ESTABLISHED 1859

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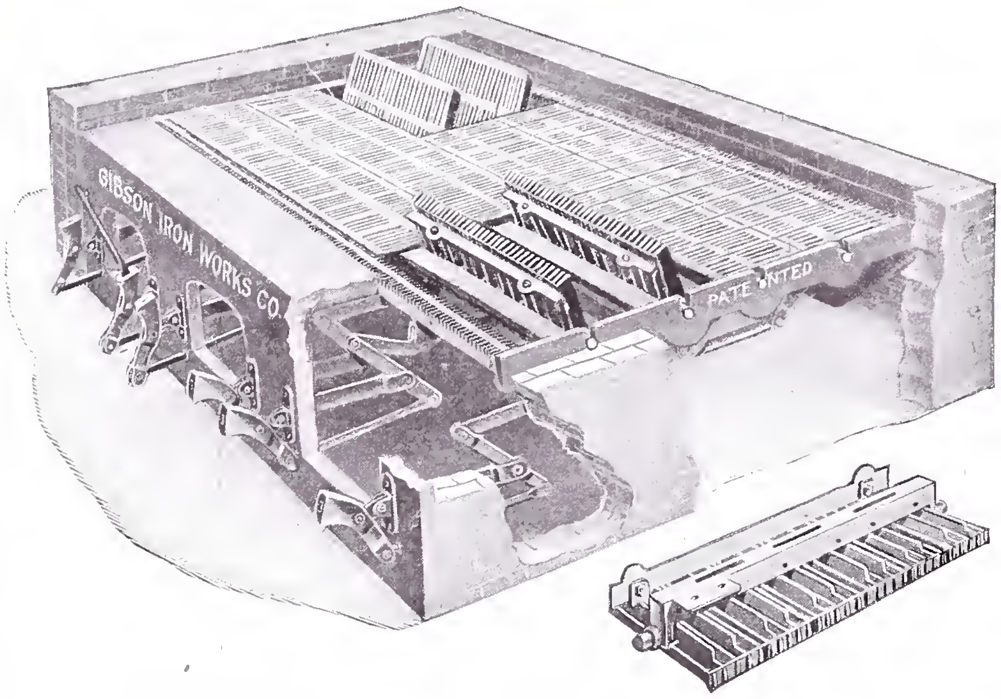
JERSEY CITY, N. J.

ESTABLISHED 1881 INCORPORATED 1904

Gibson Iron Works Co.

First, Second and Henderson Sts., Jersey City, N. J.



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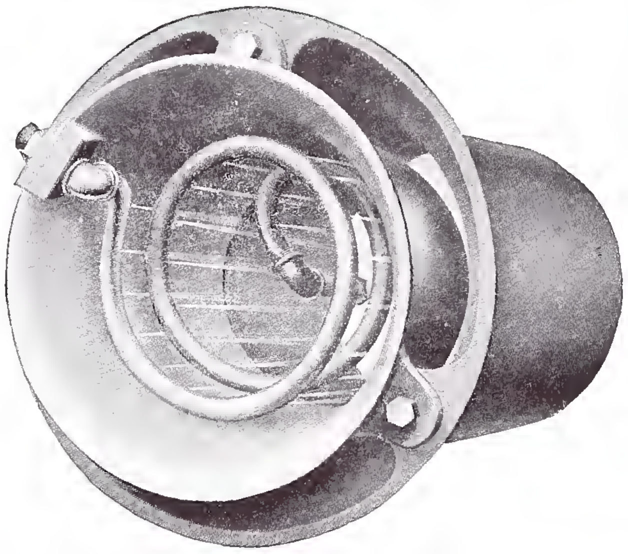
In use under boilers aggregating more than 250,000 Horse Power



The Gibson Spiral Hot Blast Blower

(Patented October 6, 1906, and June 10, 1907)

DUMPING, SHAKING AND STATIONARY GRATE BARS

SPIRAL HOT BLAST BLOWERS AND BLOWER SYSTEMS

Kettles and Caldrons of all Sizes, Plain and Steam Jacketed

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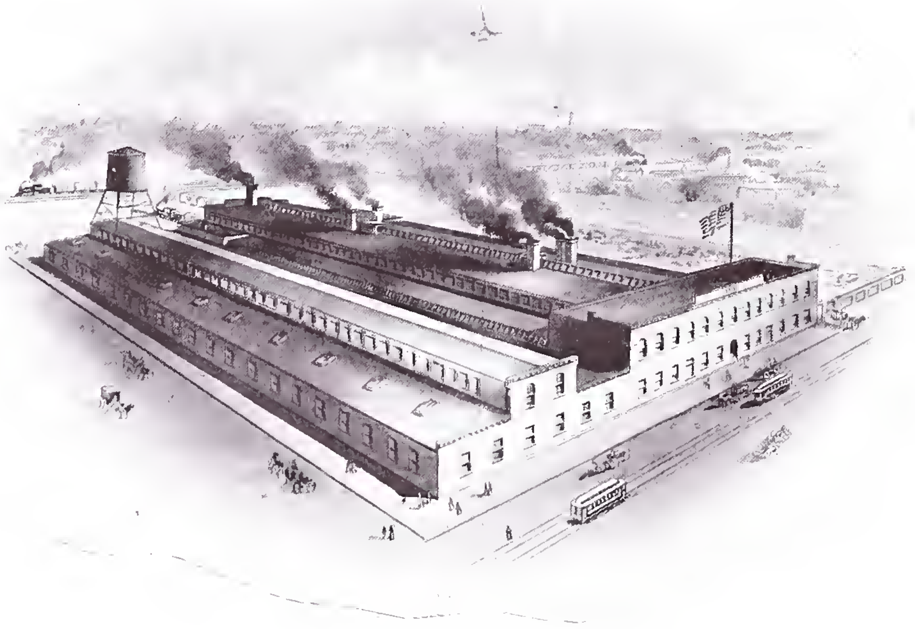

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Works also at Newark, N. J., New Haven, Conn., Buffalo, N. Y., Detroit, Mich., Chicago, Ill., Milwaukee, Wis., St. Louis, Mo., and Topeka, Kan.

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TRADE MARK-REG. U. S. PAT. OFF.

SMOOTH-ON M'F'G CO.
SOLE PROPRIETORS AND MANUFACTURERS OF THE SMOOTH-ON IRON CEMENTS AND COMPOUNDS
574 SMOOTH-ON M'F'G CO. 572

Smooth-On Iron Cements

No. 1 and No. 2. In Blue Labeled Cans.

Are for repairing leaks or breaks in castings and for making connections in steam and hydraulic work. Withstands fire. No. 1 quick hardening. No. 2 slow hardening. Applied as a paste or putty.

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In Yellow Labeled Cans

Is an iron cement for repairing blemishes, blow holes or defects in iron or steel castings. For foundrymen. Applied as a putty.

Smooth-On Elastic Cement

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A hydraulic iron cement, especially prepared for use on all seams of boilers or tanks to stop leaks, also for boiler patching and for screw thread joints. Applied as a paint, paste or putty.

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A combination of Smooth-On iron cement and rubber. Unequalled for withstanding high temperatures and pressures.

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Is an iron cement for connecting cast-iron pipe in place of caulking lead and in combination with lead.

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Smooth-On Coated Corrugated Gaskets

Are made from thin sheets of especially prepared mild tough steel, stamped with concentric rings and then coated with Smooth-On Elastic Iron Cement, in which state the gasket will keep indefinitely and is ready for immediate use at any time.

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For Iron and Wooden Vessels

Top and Bottom Paints for Everything that Floats

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PURE PAINTS FOR HOUSE, BARN AND ROOF

QUALITY GUARANTEED

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SPINDLER & DERINGER

FACTORY:

Colgate and Mercer Sts., Jersey City, New Jersey

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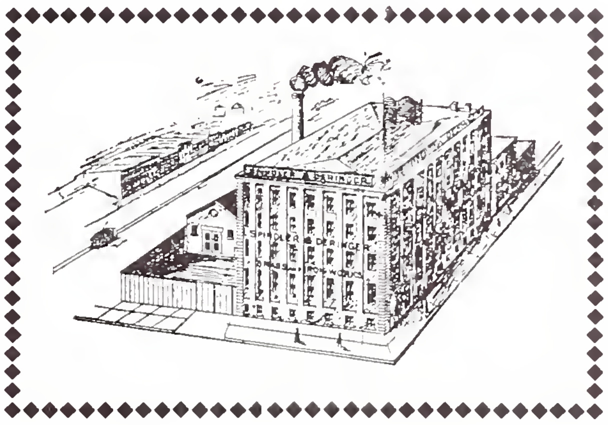

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MANUFACTURERS OF

EASTERN CARBONS
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OF EVERY DESCRIPTION

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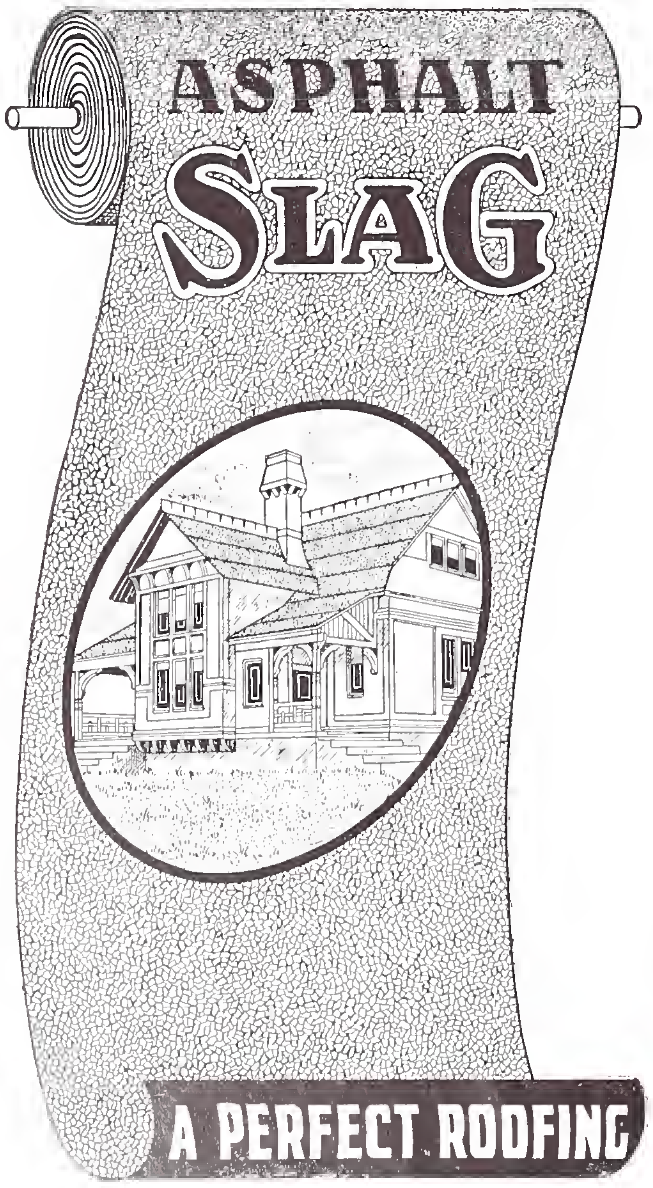

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They
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Send for Catalogue showing various shapes

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JERSEY CITY, NEW JERSEY

PASSAIC

PASSAIC is on the Erie Railroad; New York, Susquehanna and Western Railroad; and the Boonton Branch of the Delaware, Lackawanna and Western Railroad, there being stations of all three roads in the town. The population is 37,850. There are three banks, several telegraph and telephone stations, and the Wells-Fargo. United States and several local express companies.

The altitude above the sea level at the corner of Main avenue and Washington street is 57 feet. The population is 36,769.

Passaic is one of the most prosperous and rapidly growing manufacturing cities in the country. Its percentage of increase in population during the decade between 1890 and 1900 was much larger than that shown by any other city.

All streets in the residential section are finely paved and kept in excellent order. A first-class sewer system affords perfect drainage to all parts of the city. There is also a water supply carried through every street in the mains and the water is soft and pure. The railroad facilities are of the very best, and numerous trolley lines run through the main avenue, connecting the town with Paterson, Newark, Jersey City, Hackensack and all populous places in Passaic, Bergen, Essex and Hudson counties.

There are gas and electric plants which furnish lighting and power. There is, also, a fine water-power controlled by the Dundee Water Power Company, which furnishes power to many factories.

Passaic has many public schools, ranging from Kindergarten to high school; there are also several institutions of learning under private management. The churches are numerous, every religious denomination having one or more buildings, according to their numerical strength. The city has a fine public library, filled with a large and fine selection of general literature, and books of reference. The library building is a gift from the family of a gentleman long connected with the manufacturing interests of the city, who died several years ago. With a true perception of the fitness of things, the splendid library building was placed in the heart of the mill district, where the need of such an institution is greatest, and where the facilities which it offers for mental development will be most appreciated.

Passaic has a Board of Trade composed of progressive and public-spirited citizens, who pay unremitting attention to everything that may be conductive to the city's prosperity. The Board pays special attention to parties seeking a location for manufacturing industry, selects factory sites for them, which in some instances are given to the promoters of industry free of cost.

The special advantages for manufacturing industry to be found in Passaic may be briefly summarized as follows: Proximity to New York, Jersey City, Newark, Paterson, and ready communication with trolley lines with all large towns in the middle counties of the state; unexcelled traveling and a water route by way of the Passaic River to Newark, Jersey City and New York; water power for motor purposes; softness and other necessary qualities in the water supply which makes it especially adapted to the processes of bleaching and dyeing all kinds of fertile fabrics; abundant supply of labor, skilled and unskilled; comparative immunity from labor disturbances; and last, though not least in importance, a fine location for workmen's homes.

The topography is so varied and so pleasing as to gratify every desire. From the heights of Tony's Nose, named after General Anthony Wayne, and the undulating hills and vales that lie to the west, to the almost perfect plane of the eastern part of the city, extends a panorama of beautiful variety difficult to match in a city of its size. In its primitive beauty it inspired no less a man than Washington Irving to write some of the most delicate and beautiful lines ever dedicated to a feature of scenery. Abounding as it does with beautiful, healthful and convenient home-sites for the rich and poor, it has [illegible] bounded territory [illegible] There is no exaggeration [illegible] section comprises the [illegible] either for residence or business purposes in the state.

The rarest beauty is found in the [illegible] some streets with large, well [illegible] shade trees, which, in many cases, form continuous arbors extending for miles and spreading almost across the width of the streets. The health of the city is in keeping with all the works of nature in the locality. Statistics show that it is one of the healthiest cities in the state.

Socially the city is equipped with numerous churches, schools, societies, clubs, hospitals and charitable organizations. The civil and public buildings are numerous and handsome and the water, lighting and drainage systems are of the most modern type.

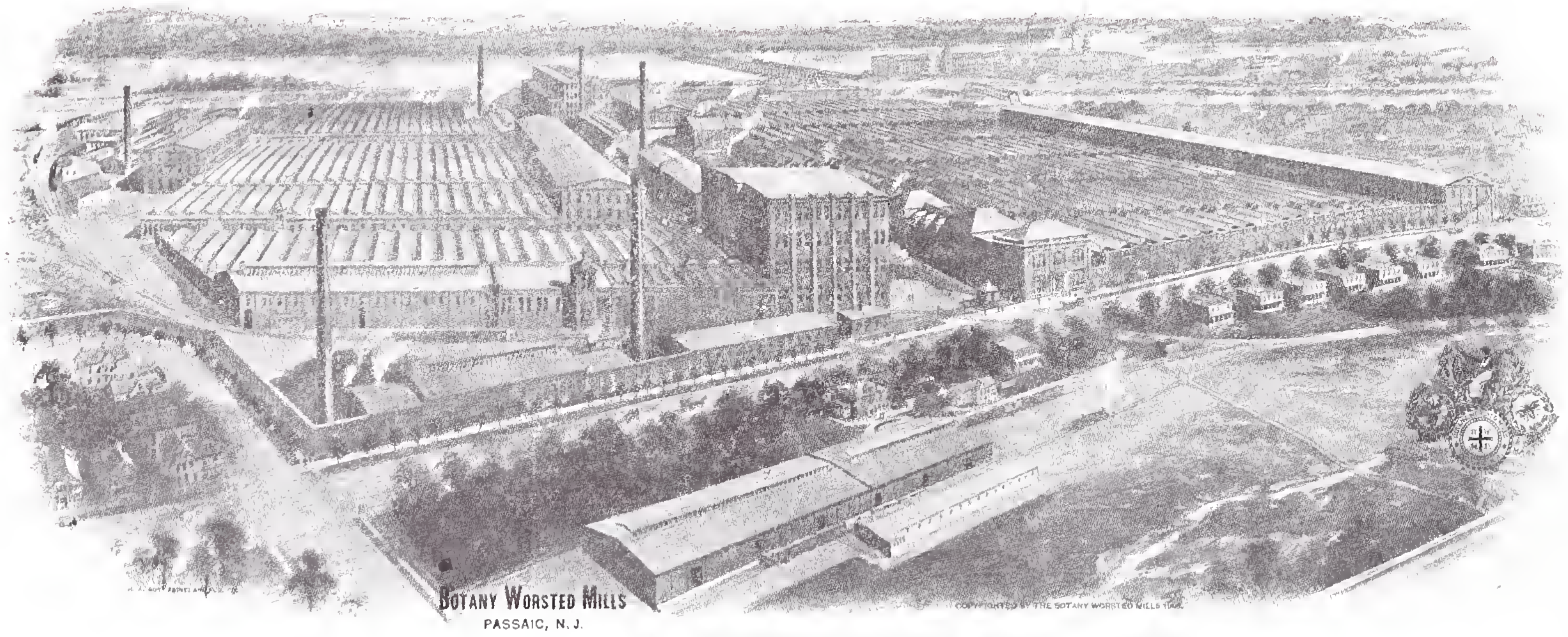
There are seven newspapers published in Passaic, two of which are printed in German—two dailies, and five weeklies.

Industrially, Passaic at the last census showed an increase of 50 per cent. for each item except in the number of establishments. The establishments engaged in the manufacture of textiles reported one-half of the total of products for the city, the worsted, cotton and woolen mills giving employment to about 6,500 wage earners. Other important industries in the city are the manufacture of rubber belting and hose, electrical machinery, apparatus, and supplies, and men's furnishing goods.

A VIEW OF THE PALISADES.

BOTANY WORSTED MILLS

Passaic, New Jersey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PASSAIC, N. J.
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MEN'S WEAR SALESROOMS:

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REPRESENTATIVE FOR WORSTED YARNS—Walter D. Larzelere, 300 Chestnut Street, Philadelphia, Pa.

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MANUFACTURERS OF

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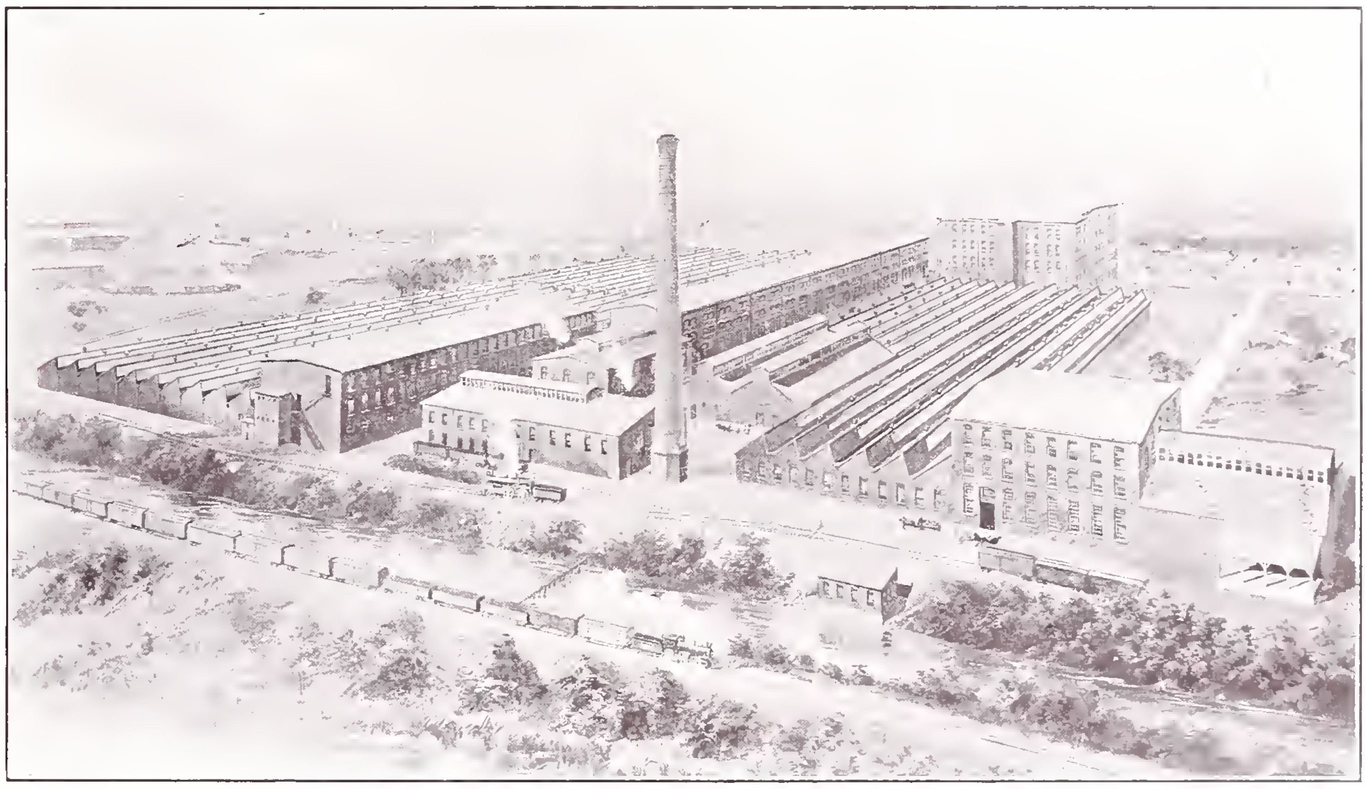

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New Jersey

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THE WASHABLE WALL COVERING

The Modern Wall Covering

A washable and perfectly sanitary wall covering made on a cloth foundation and finished in oil colors.

It is far superior to wall papers and is being used to cover the walls in some of the finest homes in America.

It will not peel, crack, fade or stain, and
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Figured patterns and tiles in dull and glazed effects.
Plain colors and tints admirably adapted to ceiling and fresco work.

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MANUFACTURERS OF

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For Pharmaceutical
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THE

Waclark Wire Co.

ELIZABETH, N. J.

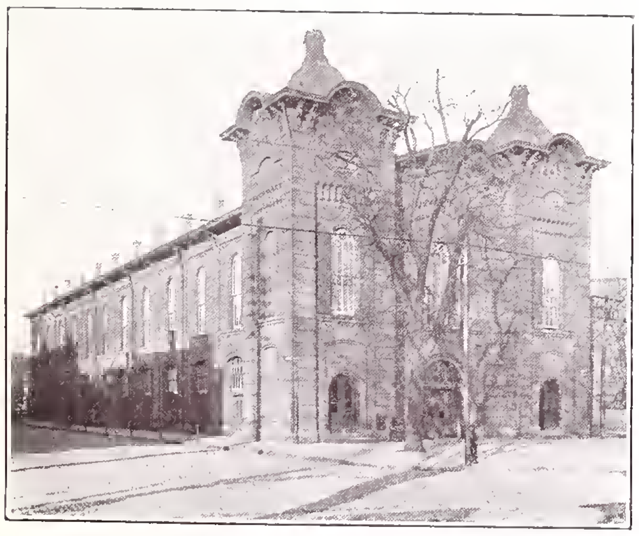
ELIZABETH

Elizabeth, the county seat of Union County, is located on the Elizabeth River and the Staten Sound, and is one of the handsomest as well as one of the oldest cities in New Jersey. Elizabethtown was the third settlement made in the state, and the first one made by the English. The land on which it stands was purchased in 1664 from some Indian chieftains, who resided on Staten Island, and was called the "Elizabethtown Grant."

Philip Carteret, the first governor of New Jersey, came to this town in 1665, which he made the capital of the province, and named it in honor of Lady Elizabeth, the wife of his brother, one of the proprietors of East Jersey. On his arrival, there were but four log cabins in the entire town. In partnership with his brother, Sir George Carteret, a little settlement was formed on the banks of the creek, where he built a house for a residence—the first government house in East Jersey. For many years after the settlement of the province, Elizabethtown was the largest and most flourishing place in it, having all the public offices and here being the residences of most of the government officials. The first General Assembly met here in 1668, and, with few exceptions, up until 1682.

Elizabeth is on the Pennsylvania Railroad, Central Railroad of New Jersey, Philadelphia and Reading Railway, Baltimore and Ohio Railroad, and the Lehigh Valley Railroad. There are ten passenger stations of these roads situated within the corporate limits of the city, all in parts most easy of access by trolley lines. Population, 60,500.

There are few cities of its size in the United States that offer attractions and advantages for either residence or business that excel those of Elizabeth. The city covers an area of twelve square miles, extending westward from the Kill von Kull four miles, with three miles of front on water navigable by the largest ships, connecting with the bay and waters surrounding New York City, and the shipping of that great commercial port to and from all parts of the world. Freights can be shipped from the docks of Elizabeth and delivered at any wharf along the water front of New York City, transferred to steam ships or to other roads running out of that city in almost as short as would be required to make the transfer by rail.



CITY HALL, ELIZABETH.

Access to all railroad stations is very easy, the streets of the city being everywhere finely paved, and trolley cars running at short intervals to almost all quarters. By means of its superior transportation facilities, the city of Elizabeth is in direct connection with all the great commercial highways of the world by land and water.

As a residence city, Elizabeth, in the matter of fine homes lining many broad, shaded avenues extending miles from the business centre into the country, is equaled by few cities elsewhere.

There are two fine theatres, in either of which is a first-class performance by some of the metropolitan companies almost every evening. Public meeting halls, fraternal organizations and every other agency that enters into and effects the social life of an intelligent and progressive munciipality are found here.

Elizabeth has six banks and eight building and loan societies, which fact, in itself, speaks more eloquently of the prosperity and thriftiness of its large working population than could be done if a long essay were to be written on that subject exclusively. The money deposited with these societies is passed out as soon as received to pay for dwellings that are constantly being erected in large numbers, and a workman who has an income, no matter how small, can, through their aid, become the owner of a home proportionate to his means.

In educational institutions Elizabeth is not outranked by any city of its class in the State. It has eleven public schools, grammar and primary, and one high school, also public, all of which are regarded as among the best-conducted and most efficient in the State. In addition to these, there are three large, first-class preparatory schools, where pupils are fitted for admission to college, and three parochial schools, in which children are given the same course of instruction as those who attend the public schools. Besides these, there are three well attended business colleges, where young men and women are prepared for taking responsible places in banks, offices and commercial houses.

Every Christian denomination is represented in Elizabeth by several churches, the Presbyterian, Baptist, Catholic and Methodist having the largest number. In addition to the Christian churches, there are two synagogues to meet the wants of the Jewish element of the population, which is quite numerous.

Elizabeth has a well organized and equipped paid fire department, consisting of six steam engines, three hook and ladder trucks and several hose carriages. The water front is guarded by three fire tugs. Fire hydrants with high water pressure are found at convenient distances apart all over the city.

The Secretary of the Board of Trade of Elizabeth writes in part as follows, concerning the advantages offered by Elizabeth as a location for manufacturing industry: "It is a peculiar condition in a large manufacturing town that there are no vacant factory buildings; this can only be explained by the unusual success attending all the great industrial establishments that have located here. Cheap coal, low freight rates, a water front three miles long with docks that will accommodate the largest ocean going ships, moderate prices for land, and a large population containing men and women skilled in almost every known variety of industry, affording an ample supply of labor, skilled or unskilled. Low taxes for manufacturing enterprises, ample banking facilities, reasonable rents, direct access to almost all the great trunk lines of railroad, all combine to make Elizabeth an ideal place for manufacturing industry. The city has a perfect sewer system running through all the streets, water equal to the best found elsewhere, finely paved streets, trolley lines to every quarter of the town, and also to Newark and all suburban centers of population within a radius of twenty-five miles.

"A steam ferry, making trips every fifteen minutes, connects the city with Staten Island. In a word, all the advantages sought after by live, progressive managers and organizers of industry are to be found in Elizabeth, and these to a higher degree than in any other city of its size in the State, or probably in the entire country."

Elizabeth has some of the most important industries and largest establishments in the country, one of them furnishing steady employment for nearly seven thousand (7,000) workmen in its immense factories here. In the various ramifications of its business, making and marketing sewing machines, this vast industrial organization employs nearly fifty thousand (50,000) persons in the United States alone. This colossal industry was moved from New York about thirty-three (33) years ago, Elizabeth being selected as its location after careful consideration had been given to the advantages and inducements offered by other cities and towns in the vicinity of the metropolis, each one of which had made every possible effort to secure the plant. Wages are paid weekly in this great establishment, the amount disbursed on each pay-day being upwards of ninety thousand (90,000) dollars.

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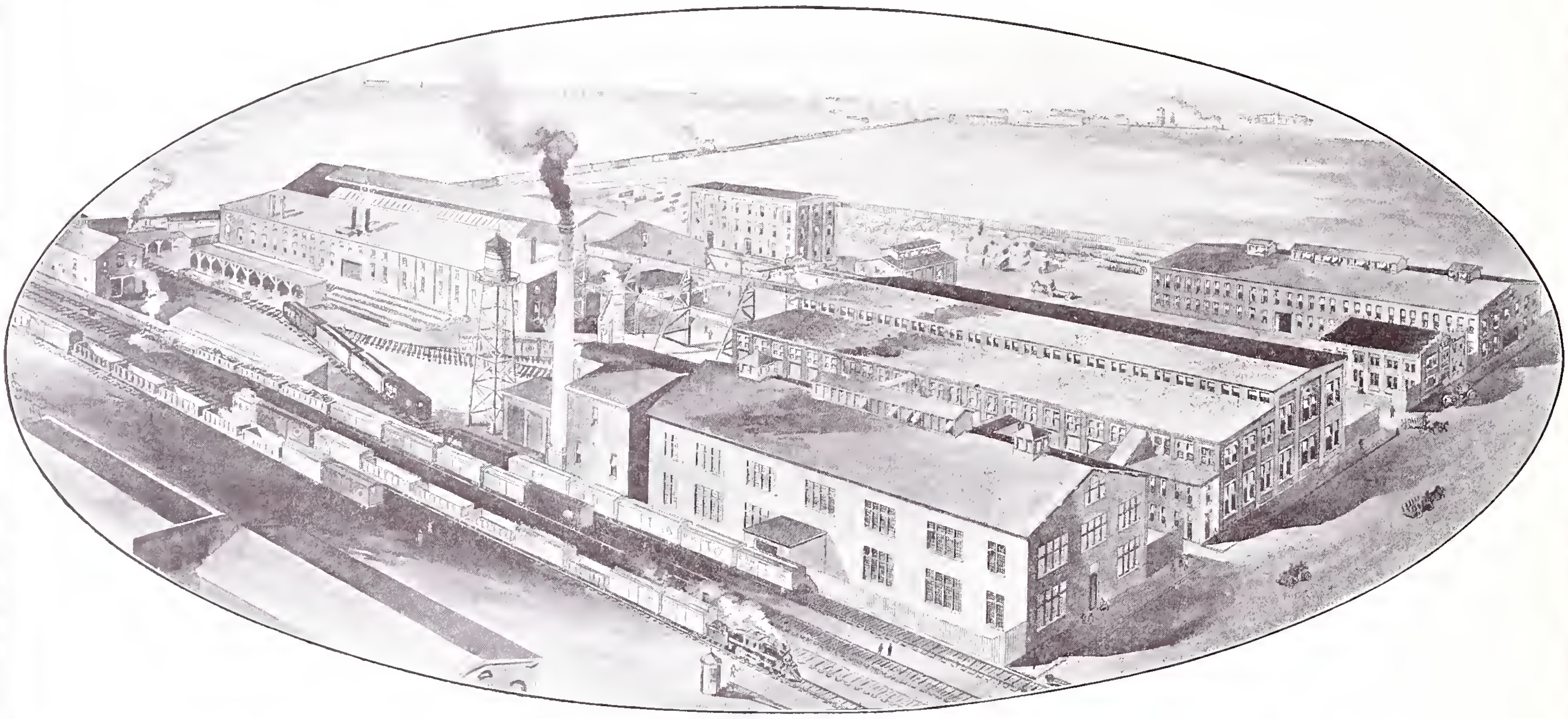
Engineering Department, Sales Office and Stockroom: 25 Dey Street, New York



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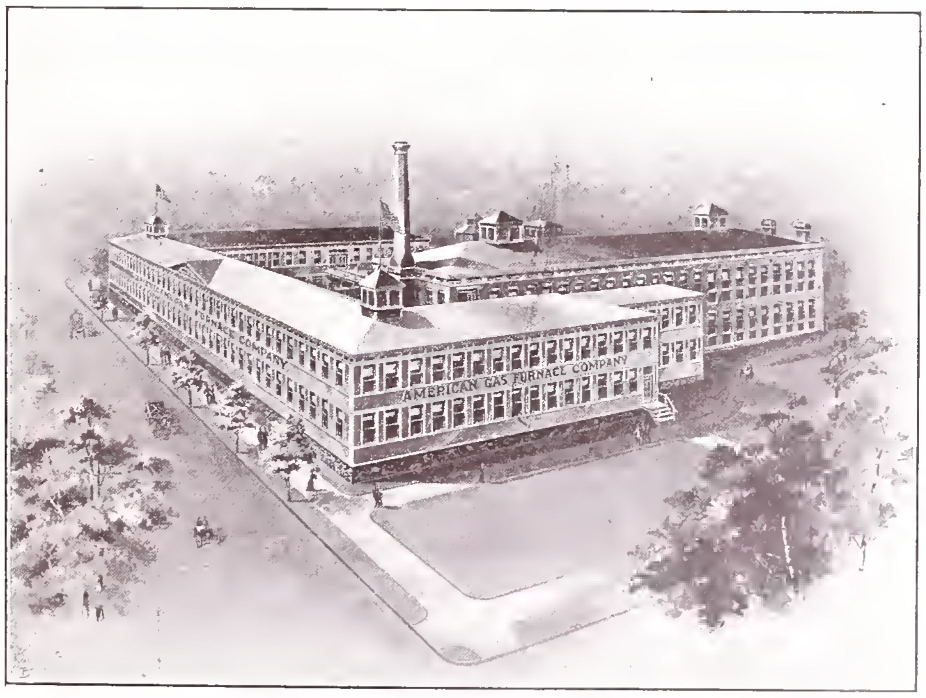

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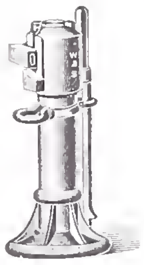
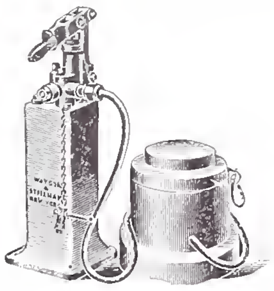
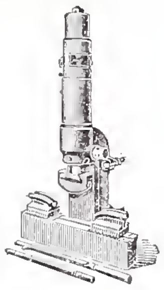
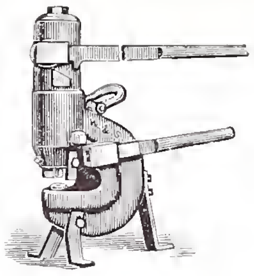
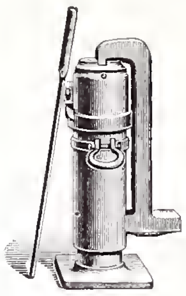
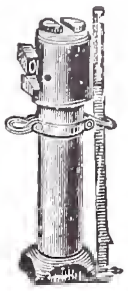

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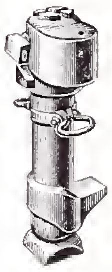
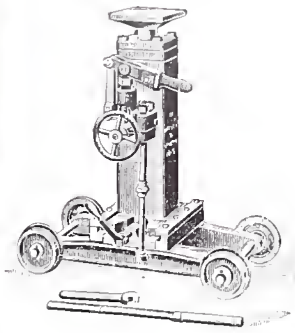
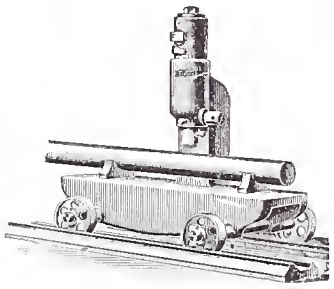
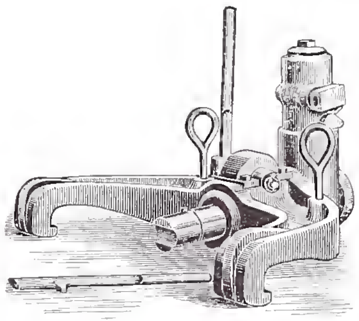
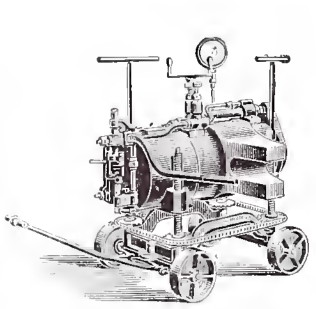
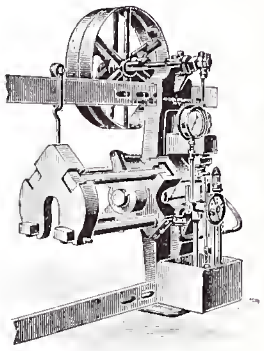

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The Origin and Present Status of the Silk Industry in Paterson, N. J.

By JOS. W. CONGDON, President of the Silk Association of America.

Paterson is noted chiefly, and has been for many years, as being the centre of the silk industry of the United States. Here the industry is developed to a larger degree of production than in any other one locality, and here are located the different co-ordinate branches of the silk business which supply manufacturers with the necessary chemical and mechanical products and appliances for the conduct of the business.

There is a story to the effect that Christopher Colt caused an attempt to be made, on a small scale, at weaving silk in this city in 1836. Originally cotton spinning and weaving were the sole industries of Paterson, after the manufacturing establishments grew up by the side of the great water power of the Passaic, in consequence of the fostering care which the Government, it was supposed, would extend to all manufacturers. The hope, however, of direct aid from the Government was never realized by any of them. Christopher Colt, and it is supposed some others, saw that the cotton industry was being gradually but steadily developed in New England to such an extent that it was likely it would be, sooner or later, controlled by New England manufacturers, to the detriment of Paterson. This proved later on to be the case. The cause was probably the cheaper water power obtainable in New England, where there was no society controlling the operations of those utilizing water power for manufacturing. Originally most of the cotton goods sold in America, and all the sail cloth for the vessels of the mercantile marine of the United States, which was then relatively much larger than now, were made in Paterson. The transition from cotton to silk working was very gradual, and the development of silk manufacturing was small, even up to the beginning of the Civil War; and the last operations in spinning cotton were not abandoned until six or eight years after the war.

Whether Christopher Colt did make the experiment of working silk in 1836, or not, it is certain that a real beginning was made in 1838 in the old Gun Mill, which was built in 1835, to be used as a place for manufacturing Colt's repeating fire arms. The first silk machinery operating in Paterson was brought to this mill from Hartford, Conn., where it was bought at the closing out of a small bankrupt silk manufacturer. It was bought by Christopher Colt and he was backed in his little enterprise by Crumbie & Draper, a dry goods commission house in New York. The experiment did not accomplish much. About one bale of silk only was worked and then the enterprise was abandoned.

Mr. George W. Murray, who was visiting Northampton, Mass., which was quite a summer resort at that time in 1840, became acquainted with Mr. John Ryle, who was working in a shop in that city. He found that Mr. Ryle had learned the working of silk in England, and took quite a fancy to the young man. He knew of this little collection of silk machinery in Paterson, and proposed to Mr. Ryle to buy it, if he would run it on shares. He paid $3,203.00 for the outfit, and Mr. Ryle got in readiness to start out making sewing silk and machine twist. Upon endeavoring to buy raw silk for a start, it was found that there was only half a bale in New York City, and that was all there was in the country. There had been one bale, but a Philadelphia concern had bought half of it a few months previous.

This was the start of what has grown to be a great business in this locality. Not much development was made prior to the Civil War. There were not more than seven or eight concerns engaged in the business in 1860, and they were all operating in a very small way.

At the present time there are about two hundred and forty individuals, firms and corporations engaged in the manufacturing of silk goods of one kind or another, and the co-ordinate branches connected with the business. There are in this city manufacturers of dress goods, ribbons, linings, tapestry and upholstery goods, plush, hat bands, veilings, velvets, chenille trimmings and braids. Here are loom builders, and makers of all kinds of silk machinery in infinite variety, reed, harness, bobbin, ribbon block, shuttle, quill and Jacquard machine manufacturers, and makers of all kinds of dye house tubs and fittings. Here are sketchers, designers and card cutters, chemists and chemical works, dyers of silk, of cotton, of velvets, warp printers, throwsters, finishers, and dealers in hard and soft silk waste.

The last available figures of reliable character, as to the magnitude of the business in this city, are obtainable from the census of 1904, at which time there were in this city 13,140 looms for weaving broad goods, 3860 ribbon looms and 153,160 throwing spindles. In that year, with a production of about seventy per cent of full capacity, there were consumed 2,192,000 lbs. of raw silk, 81560 lbs. of spun silk, 3,260 lbs. of artificial silk, 835,300 lbs. of cotton yarns, 204,900 lbs. of mercerized yarn, and 4,900 lbs. of wool yarn. In that year the production amounted to 23,314,000 yards, of a value of about $16,000,000.00, and the ribbon production was equal to about $9,000,000. It may be safely estimated that there are now more than 15,000 broad looms and about 4500 ribbon looms in this city, and capacity for throwing 1,500,000 lbs. of silk per annum. (Less than half of the capacity of the weaving machinery in Paterson is thrown in this city.) It is altogether likely that about 3,500,000 lbs. is the natural consumption of the equipment of the machinery at present installed, if running at full capacity, capable of producing about $23,000,000 worth of broad goods and $13,000,000 of ribbons in a year.

Very few have any idea of the intricate and complex nature of the [illegible] with all the different [illegible] manipulations involved. A silk fabric [illegible] with a printed warp and groundwork of brocade figure thrown in, and a pure gros grain stripe, must have passed through about ninety different handlings, including weighings, from raw silk to the finished product.

Prior to the reception of the raw silk to begin this process of manufacture, the production of the raw silk itself, from the inspection and selection of the silk worms' eggs for hatching, which inspection is always made necessary by the presence of diseased eggs, to the finished skein for the market, the worms themselves must have been handled about twenty different times, in transferring them to clean trays, and the operations of gathering the cocoons, killing the chrysalis, assorting the cocoons, the reeling, the making up, the inspection, the sizing, the conditioning, the weighing and the packing involve many handlings.

Very few have the faintest idea of the magnitude of the industry of producing raw silk, and the immense amount of labor involved in that production. It takes about three hundred silk worm cocoons to weigh one pound, and it requires about eleven pounds of cocoons to produce one pound of reeled silk, consequently it takes about 3300 worms to produce one pound of silk. Therefore, a manufacturing concern using 1000 lbs. per day of raw silk works up the product of 3,300,000 worms "every day daily;" and if the total annual consumption of raw silk in this city as estimated, is 3,500,000 lbs., the number of worms required to produce this number of pounds is 11,550,000,000. When it is seen that eleven thousand millions of worms are necessary to produce the raw silk to supply the industry in Paterson alone for one year, the number of worms that must be handled to supply the total quantity of raw silk used in the industry in the whole world is something simply amazing. A consideration of this fact leads one to realize how largely millions of peasant people in China, Japan and Italy are dependent upon this industry for their very livelihood.

The delicate nature of the work of reeling raw silk from the cocoons, due to the extreme fineness of the filament or thread, is another of the impressive features of the industry. In making its cocoon the worm spins two threads from its mouth, which unite into one as they issue, and this united thread is wound around most evenly and regularly, the worm working from the inside. So fine is this thread that from an average full cocoon made by a healthy worm a thread of from 3000 to 4000 yards can be reeled off,—a single thread two miles long.

In reeling, the threads of from four to six, or even more cocoons are united, making the single thread of "raw silk" as commercially know. Consequently, in ordinary woven silk fabrics there will be, in the organzine warp, from 800 to 2000 threads per inch, and in the tram filling from 1000 to 2000 threads per inch of the original threads as spun by the worms.

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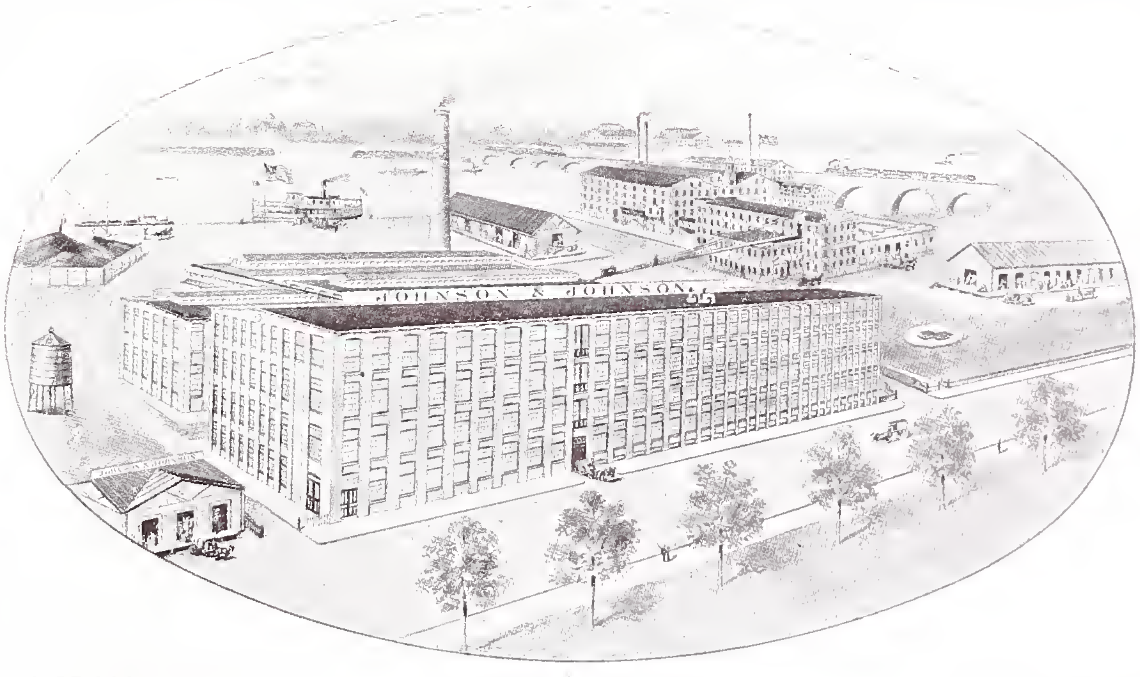

Johnson & Johnson are undoubtedly the largest manufacturers in the world of medicinal plasters, absorbent cotton, bandages and surgical supplies. Their factories are located at New Brunswick, New Jersey, adjacent to the City of New York, by means of Raritan River and Bay, and railroad connections. Goods are sent direct from their factory by rail or steamer to all the large ports, at which place they are re-shipped to their final destination. For shipping purposes Johnson & Johnson maintain their own line of steamers.

The factories of Johnson & Johnson consist of thirty-five large buildings, occupying an area of 46,451 square metres. Their plant is considered the largest and most complete in the world, consisting of thirty-five buildings, employing over 1000 operatives, with an output per year of 25,000,000 yards of surgical gauze, 3,000,000 pounds absorbent cotton, 20,000,000 porous plasters.

They are manufacturers of all kinds of medicinal plasters, bandages, surgical dressings, and surgical supplies that are known and used by the profession.

The products of Johnson & Johnson are found on sale in all reputable drug houses throughout the world. The commercial methods employed by this house are based upon strictly legitimate business qualities, and all of the goods manufactured and offered by them are of the highest standard and excellence.

Johnson & Johnson are ranked among the largest consumers in the world of raw material, such as is used in the manufacture of bandages and surgical appliances. They are the only factory that manufacture such material as gauze and surgical dressings from the raw unfinished material to the finished product—all within their own establishment.

Johnson & Johnson are not only manufacturers, but scientific investigators, who have contributed very largely to the advancement of the medical and surgical profession. In connection with their factories in New Brunswick there has been established research laboratories, where at all times there is employed a competent force who dedicate their time and labor to investigations in chemistry, surgery, bacteriology and allied science.

It is an admitted fact that the material emanating from this house has aided the medical and surgical profession throughout the world to apply the best methods of advanced science.

Literature and lists descriptive of the products of Johnson & Johnson are issued in various languages and may be had upon application.

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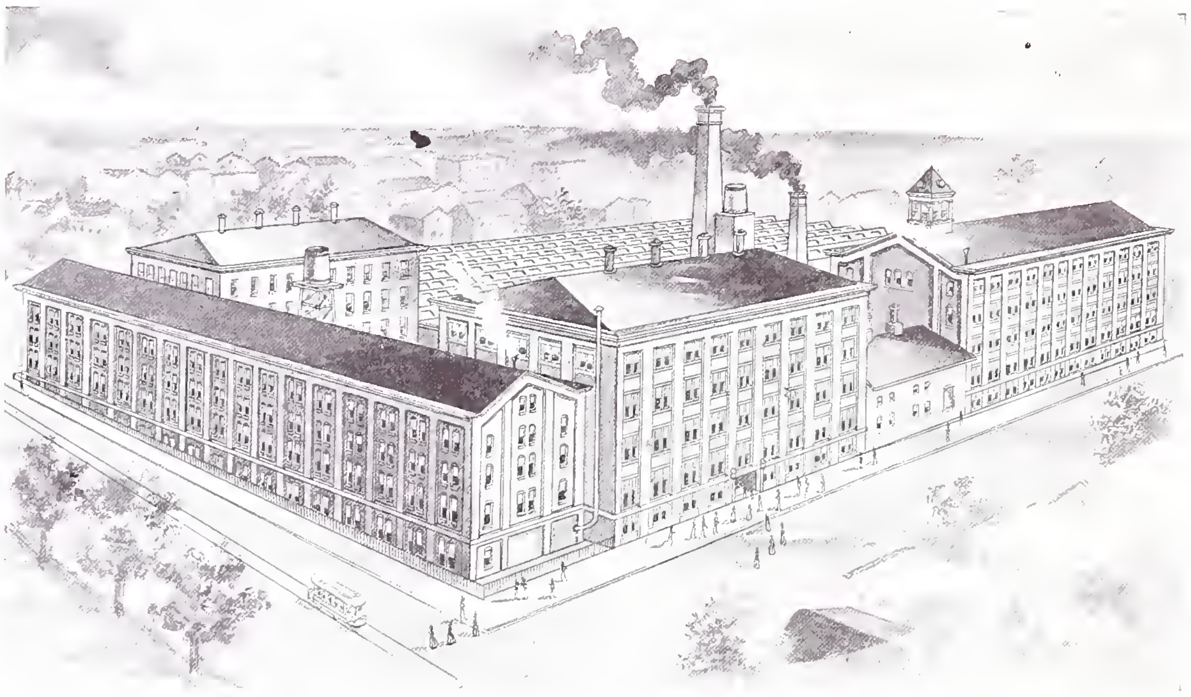

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Office, 472 and 474 Broome Street, New York

HOBOKEN

Hoboken, which has a population of 65,500, is situated on the Delaware, Lackawanna and Western Railroad, at the base of the Palisades, the principal streets running north and south, parallel to the river. It is located on the New Jersey side of the Hudson River and joined with New York by a fine line of ferry boats, which are run in connection with the railroad. There is a trolley service to all parts of the city and connecting with lines running to every municipality in Hudson, Essex, Union and Passaic counties.

The land where Hoboken is now was part of a partonship granted to Michael Pauw in 1630, and was then called Hobocan Hacking, "the land of the tobacco pipe," in allusion to the fact that Indians carved pipes from a kind of stone found there. A house was built about 1640 by Arendt Tennesson Van Putten and a straggling settlement grew up, but the present city really dates from 1804, when J. Stevens purchased the land and laid out a about 2,000; and in 1885, with a population of about 6,700, a charter as a city was obtained. The site of the Stevens Institute of Technology is fronted by Hudson Park, in which is a soldier's monument, and in Church Park Square are situated the public library and firemen's monument. St. Mary's Hospital is a noteworthy institution.

The government of the city of Hoboken is vested in a Mayor, who holds office for two years, and city council. The mayor appoints the school library, fire and health commissioners, also the assessors. The Police commissioners are appointed by the mayor and approved by council. Council elects inspectors, the city clerk and his assistants.

Hoboken has a first class sewer system, which appords perfect drainage for all parts of the city; an abundant supply of good pure water, well paved streets, electric light and power plants, local and long distance telephone, excellent schools and enough of them to afford educational opportunties for all the children in the community.

There are churches representing every denomination, free public library, building and loan societies, social and fraternal organizations and every other public or private utility required for the convenience of home or business.

Land in almost every section of the city may be purchased for factory sites and there are well paved streets everywhere. The advantage of one location over another is very slight so far as freight handling is concerned. Freights may be shipped by rail from Hoboken to any part of the United States and by water to any part of the world.

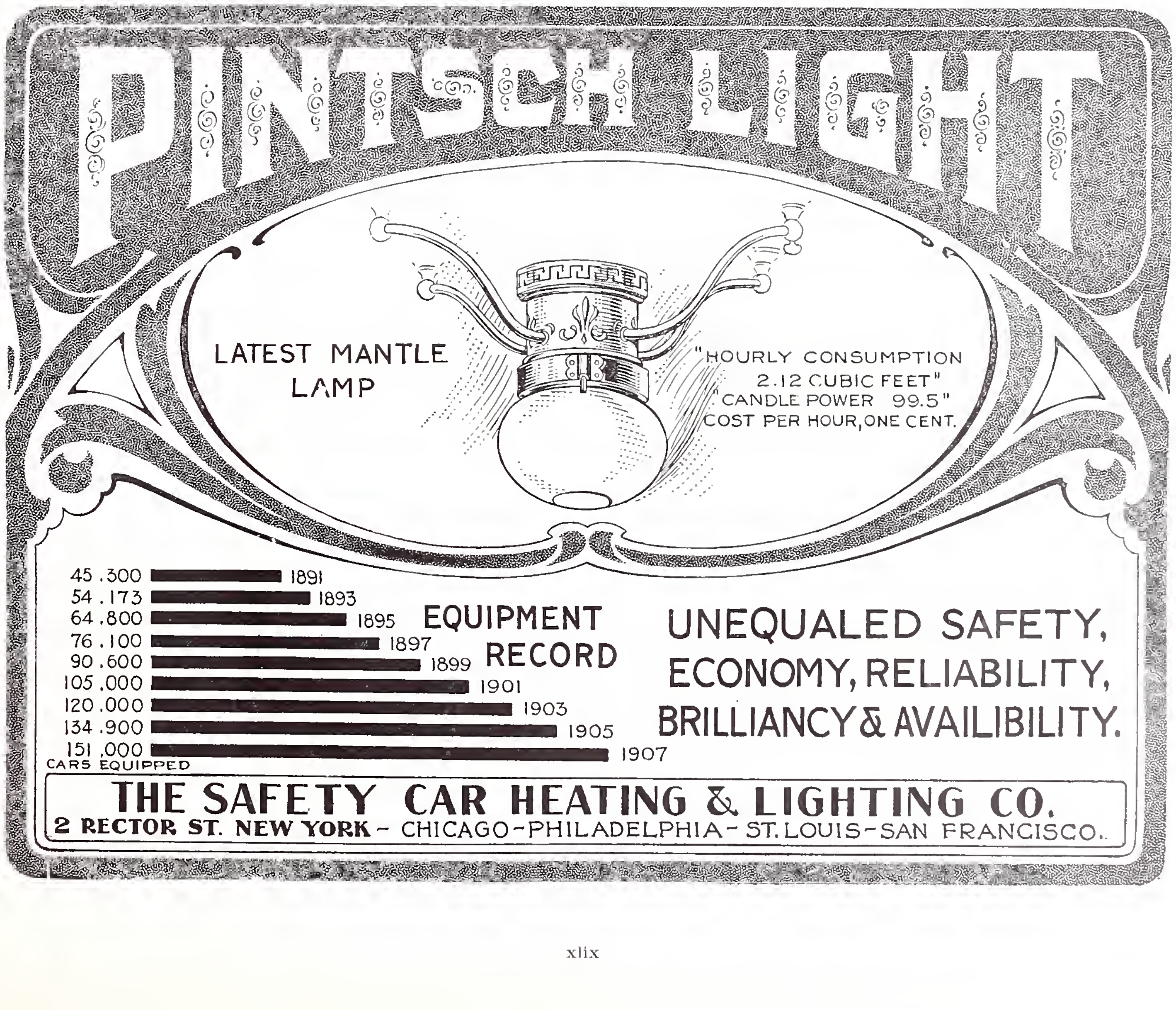
Labor skilled in every known occupation may be secured here in numbers sufficient to meet any possible demand.

STEVENS INSTITUTE OF TECHNOLOGY.

The Stevens Institute of Technology, located in Hoboken, was founded by Edwin A. Stevens, the surviving member of a family trio of pioneer american engineers, the first being Col. John Stevens, his father, and the second, Robert L. Stevens, his brother. At his death in 1868, he left a plot of ground, a building fund of $150,000 and an endowment of $500,000 for an "Institution of learning." After careful study of technical institutions in this and foreign countries, it was decided that it should be a school of mechnical engineering. The doors of the institution were thrown open to the public September, 1871.

The course of study has grown steadily with the times and now includes complete studies in theortetical, practical and experimental mechanical and electrical engineering, engineering chemistry, mathematics, physics, English and logic, and modern languages. The institution is well provided with large and well regulated laboratories, machine and woodworking and foundry shops, and well lighted draughting rooms.

Since 1873, the institution has graduated nearly 1,500 men.



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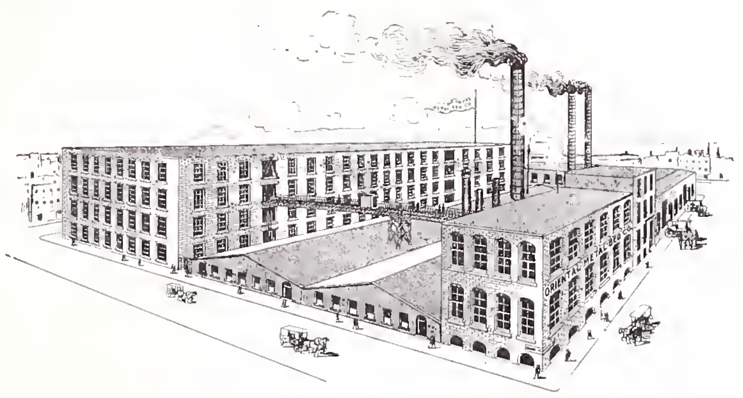

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Underground
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